XR-U500RDS/U700RDS

SERVICE MANUAL

AEP Model

Photo : XR-U700RDS

SPECIFICATIONS

Cassette player section

Tape track 4-track 2-channel stereo
Wow and flutter 0.08 % (WRMS)
Frequency response 30 – 20,000 Hz
Signal-to-noise ratio

(XR-U700RDS)

Cassette type	Dolby B NR	Dolby C NR	Dolby NR off
TYPE II, IV	67dB	73dB	61dB
TYPE I	64dB	70dB	58dB

(XR-U500RDS)

Cassette type	Dolby B NR	Dolby NR off
TYPE II, IV	67dB	61dB
TYPE I	64dB	58dB

Tuner section

FM

Tuning range 87.5 – 108.0 MHz
Antenna terminal External antenna connector
Intermediate frequency 10.7 MHz
Sensitivity 8 dBf
Selectivity 75 dB at 400 kHz
Signal-to-noise ratio 65 dB (stereo), 70 dB (mono)
Harmonic distortion at 1 kHz 0.5% (stereo), 0.3% (mono)
Separation 35 dB
Frequency response 30 – 15,000 Hz
Capture ratio 2dB

MW/LW (SW, for the German model)

Tuning range MW: 531 – 1,602 kHz
LW: 153 – 281 kHz
SW: 5,950 – 6,205 kHz
Antenna terminal External antenna connector
Intermediate frequency 10.71 MHz/450 kHz
Sensitivity MW: 30 µV
LW: 50 µV
SW: 50 µV

Power amplifier section

Outputs Speaker outputs (sure seal connectors)
Speaker impedance 4 – 8 ohms
Maximum power output 25W×4 (at 4 ohms) (XR-U700RDS)
20W×4 (at 4 ohms) (XR-U500RDS)

使用時は添付資料も参照のこと
Refer to the additional documents.

Model Name Using Similar Mechanism		NEW
Tape Transport Mechanism Type	XR-U500RDS	MG-55PC-31
	XR-U700RDS	MG-55PB-31

General

Output lead Power antenna relay control lead
Power amplifier control lead
Tone controls Bass ±8 dB at 100 Hz
Treble ±8 dB at 10 kHz
Power requirements 12 V DC car battery (negative ground)
Dimensions Approx. 186 × 57 × 170 mm (w/h/d) not incl. projecting parts and controls
Mounting dimension Approx. 182 × 53 × 153 mm (w/h/d) not incl. projecting parts and controls
Mass Approx. 1.3 kg
Supplied accessories Wireless remote commander RM-X36 (1) (XR-U500RDS: AEP model, XR-U700RDS)
Mounting hardware (1 set)
Power connecting cord (1)
Front panel case (1)
Optional accessories UNILINK cable (supplied with an RCA pin cord)
RC-61 (1 m), RC-62 (2 m)
RCA pin cord RC-63 (1 m), RC-64 (2 m), RC-65 (5 m)
Optional equipment CD changer CDX-U606, CDX-U404, CDX-U303, etc.
Source selector XA-U20, XA-U40
Digital pre-amplifier XDP-U50D (XR-U700RDS)

Design and specifications subject to change without notice.

FM/MW/LW(SW) CASSETTE CAR STEREO

SONY®

This section is extracted from instruction manual.

Features

General

- **Built-in power amplifier (max. output: 4 ch x 25W (U700RDS), 20W (U500RDS)) enables you to enjoy a 4-speaker system.**
- Supplied with **the wireless remote commander (XR-U500RDS : AEP model, XR-U700RDS).**
- **Detachable-front panel** enables you to take the front panel away with you when you leave your car. (page 13)
- **Caution alarm** will be activated if you turn off the ignition key without removing the front panel from the unit.
- Switchable **two color illumination (amber and green)**. (page 9)
- Provided with a **digital 24-hour clock.** (page 14)
- Line outputs for connecting an optional power amplifier.
- **Telephone-mute function** for decreasing the volume automatically with a telephone call.

Tuner section

- Up to 40 stations can be preset: 20 stations on FM and 10 stations each on MW and LW (SW, for the German model).
- **BTM (Best Tuning Memory) function** automatically searches and stores the stations with the strongest signals on the preset number buttons in order of frequency. (page 28)
- The information services of **FM RDS station** can be received. (page 32)
- Compatible with **the RDS features** such as **EON (Enhanced Other Networks), AF (Alternative Frequency), TA (Traffic Announcement)** and **CT (Clock Time) function.** (page 33)

Cassette player section

- **Dolby B and C NR*** system reduces hiss noise during tape playback. (page 7) (XR-U700RDS)
- **Dolby B NR*** system reduces hiss noise during tape playback (XR-U500RDS).
- **Intro scan function** for playing the first 10 seconds of each track. (page 15)
- **Repeat play function** for playing back a currently playing track repeatedly. (page 15)
- **Blank skip function** for automatically skipping blank spaces during tape playback. (page 7)
- **ATA (Automatic Tuner Activation)** for automatically turning on the tuner while fast-forwarding or rewinding a tape. (page 7)

*Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol ⊡⊡ are trademarks of Dolby Laboratories Licensing Corporation.

CD changer control section (when the optional Sony CD changers are connected)

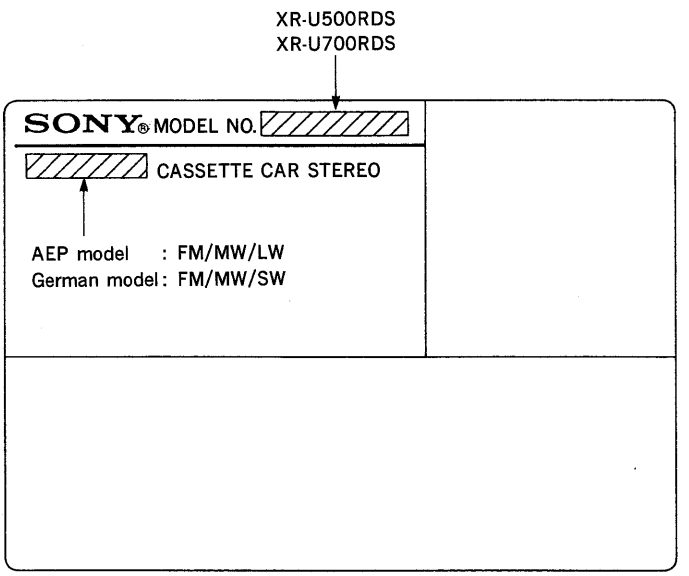
- **Several Sony CD changers (not supplied) can be connected and controlled** by the use of the Sony source selector(s) (not supplied).
- **Custom file function** for displaying the title of each disc and setting the PLAY/SKIP mode on each track. (page 20)
- **Shuffle play function** for playing tracks in random order. (page 17)
- **Intro scan function** for playing the first 10 seconds of each track. (page 19)
- **Repeat play function** for playing a currently playing track repeatedly. (page 18)

DSP control section (when the optional digital signal processor XDP-U50D is connected) (XR-U700RDS)

- **Surround menu** enables you to select different soundfields inside your car.
- **DSP custom file function** enables the discs to be played in the customized DSP modes. (page 46)
- **LSM function** enables the programs to be played with the preset surround menu. (page 48)

MODEL IDENTIFICATION

—Model Number Label—



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SECTION 4
ELECTRICAL ADJUSTMENTS

TEST MODE

This set have the test mode function. In the test mode, FM Auto Scan/Stop Level and AM Auto Scan/Stop Level adjustments can be performed easier than it in ordinaly procedure.

〈Set the Test Mode〉

1. Set the "OFF" mode.
2. Push the preset [4] button.
3. Push the preset [5] button.
4. Press the preset [1] button for two seconds.
5. Then the display indicates five patterns and stops, the test mode is set.

〈Rerease the Test mode〉

1. Push the "OFF" button.

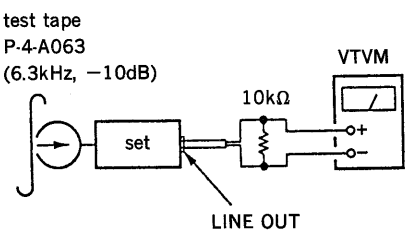
See the adjustment location from on page 28 for the adjustment.

DECK SECTION 0dB=0.775V

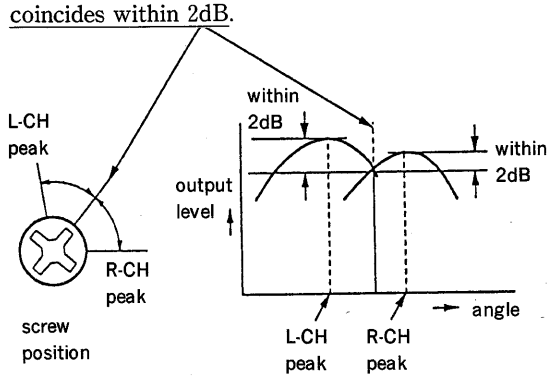
PB Head Azimuth Adjustment

Procedure :

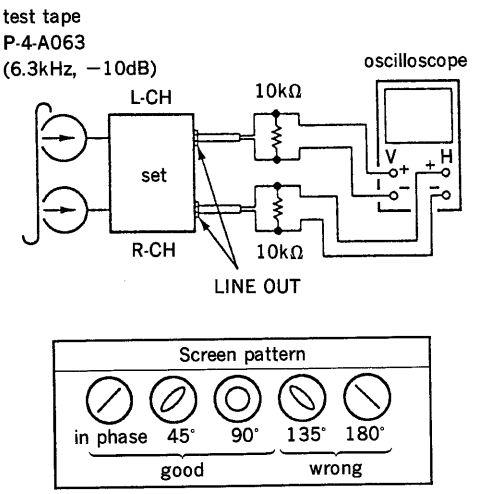
1. Put the set into the FWD PB mode.



2. Turn the screw and check the output peak value. Adjust the screw so that the peak value in channels L and R coincides within 2dB.

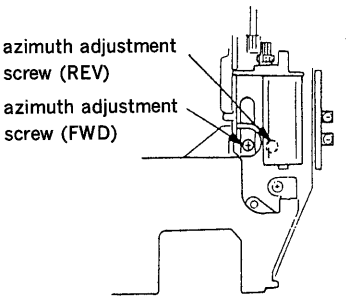


3. Check the phase in the PB mode.



4. Repeat the above adjustment for the REV PB mode.

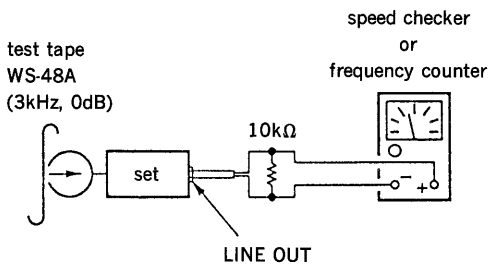
Adjustment Location : PB head



Capstan Motor Tape Speed Adjustment

Procedure :

1. Put the set into the FWD PB mode.



Specification : Constant speed

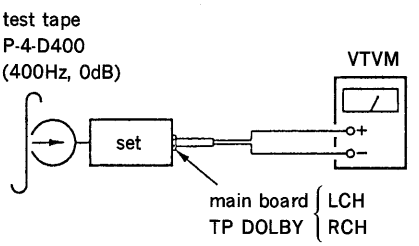
Speed checker	Frequency counter
−1.5 to +2.5%	2,955 to 3,075Hz

Adjustment Location : capstan motor volume

DOLBY Level Adjustment

Setting :

(Dolby NR) button : OFF
SEL (volume) button : Maximum
SEL (balance) button : Center
SEL (bass) button : Center
SEL (treble) button : Center



Procedure :

1. Put the set into the FWD PB mode.
2. Adjust RV301 (L-CH) and RV401 (R-CH) so that VTVM reading is $-4.7\ ^{+1.0}_{-0}$ dB (0.45 to 0.51V).

Adjustment Location : equalizer board

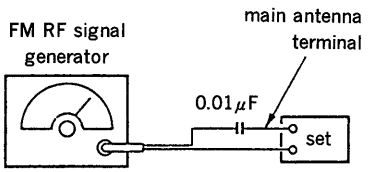
TUNER SECTION 0dB=1μV

Cautions during repair
When the front end is defective, replace it by a new one because its internal block is difficult to repair.

FM Auto Scan/Stop Level Adjustment

Setting :

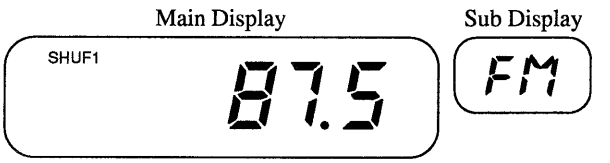
TUNER button : FM



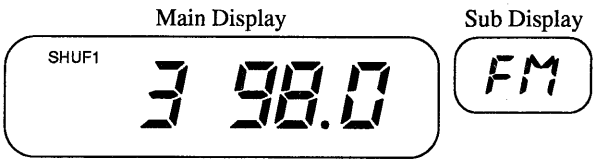
Carrier frequency : 98.0MHz
Output level : 22dB (12.6μV)
Mode : mono
Modulation : no modulation

Procedure :

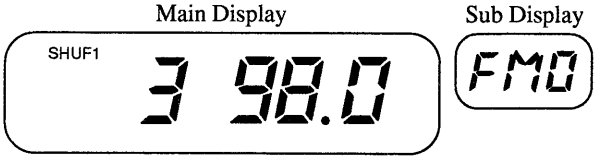
1. Set to the test mode. (See page 24.)
2. Push the [TUNER] button and set to FM.



3. Push the preset [3] button.



4. Push the [SEEK/AMS+▶▶I] button.
5. Adjust with the volume RV3 on TU1 so that the "FM" indication turns to "FM0" indication on the sub display window.
   But, in case of already indicated "FM0", turn the RV3 so that put out light "0" indication and adjustment.



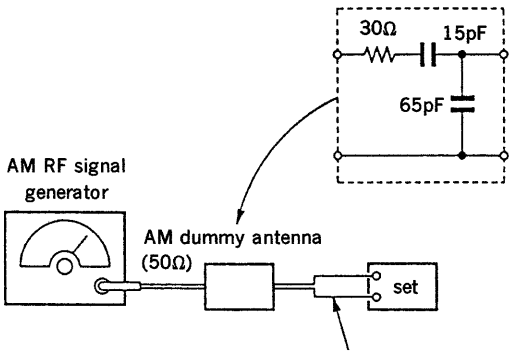
Speci fication : Stop sensitivity : 22dB±3dB

Note) "0" indication of sub display was align voltage of TP (SD).
TP (SD) voltage 0V →"0" light off
TP (SD) voltage 5V →"0" light on

MW Auto Scan/Stop Level Adjustment

Setting :

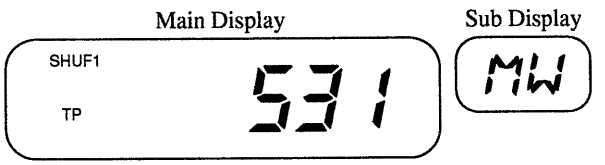
TUNER button : MW



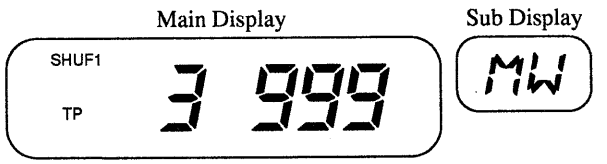
Carrier frequency : 999kHz
30% amplitude modulation by 400Hz signal
Output level : 33dB (44.7μV)

Procedure :

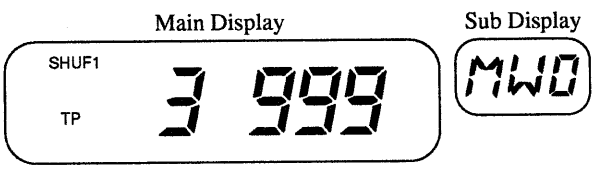
1. Set to the test mode. (See page 24.)
2. Push the [TUNER] button and set to MW.



3. Push the preset [3] button.



4. Adjust with the volume RV1 on TU1 so that the "MW" indication turns to "MW0" indication on the sub display window.
   But, in case of already indicated "MW0", turn the RV1 so that put out light "0" indication and adjustment.



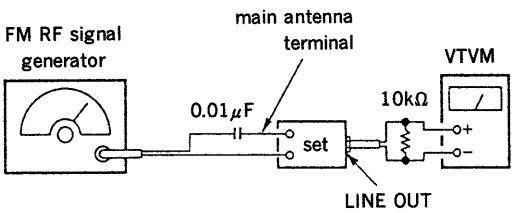
Specification : Stop sensitivity : 33dB±3dB

Note) "0" indication of sub display was align voltage of TP (SD).
TP (SD) voltage 0V →"0" light off
TP (SD) voltage 5V →"0" light on

High Cut Control Effect Adjustment

Setting :

TUNER button : FM



Carrier frequency : 98.0MHz
Output level : 60dB (1mV)
Mode : mono
Modulation : 1kHz, 75kHz deviation

Procedure :

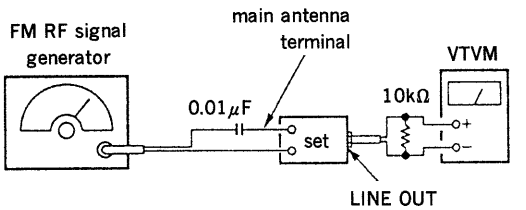
1. Tune the 98.0MHz.
2. The then output level is supposing that (A) dB.
3. Adjust with the volume RV2 on TU1 so that the output level is (A)−6dB then signal generator input set to 20dB.

Adjustment Location : main board (TU1)

FM Noise Focus Adjustment

Setting :

TUNER button : FM



Carrier frequency : 98.0MHz
Output level : 60dB (1mV)
Mode : mono
Modulation : 10kHz, 75kHz deviation

Procedure :

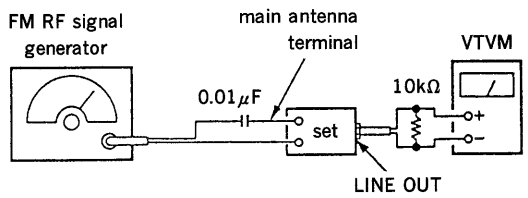
1. Tune the 98.0MHz.
2. The then output level is supposing that (B) dB.
3. Adjust with the volume RV5 on TU1 so that the output level is (B)−30dB then signal generator input set to 20dB.

Adjustment Location : main board (TU1)

FM Stereo Separation (60dB) Adjustment

Setting :

TUNER button : FM



Carrier frequency : 98.0MHz
Output level : 70dB (3.2mV)
Mode : stereo
Modulation : main : 1kHz, 33.75kHz deviation (45%)
sub : 1kHz, 33.75kHz deviation (45%)
19kHz pilot : 7.5kHz deviation (10%)

Procedure :

FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV4 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV4 for minimum

L-CH Stereo separation : Ⓐ − Ⓑ
R-CH Stereo separation : Ⓒ − Ⓓ
The separations of both channels should be equal.

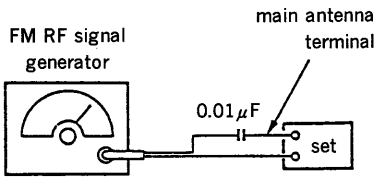
Specification : Separation more than 30dB

Adjustment Location : main board (TU1)

FM Signal Meter Adjustment

Setting :

TUNER button : FM

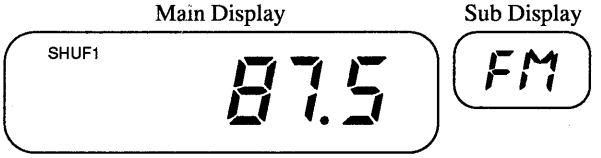


Carrier frequency : 98.0MHz
Output level : 33dB (44.7μV)
Mode : mono
Modulation : no modulation

Procedure :

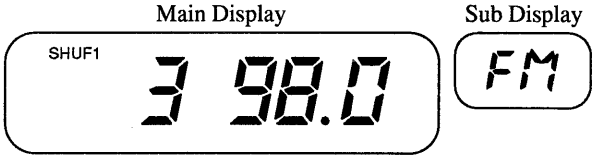
1. Set to the test mode. (See page 24.)
2. Push the [TUNER] button and set to FM.

Main Display / Sub Display



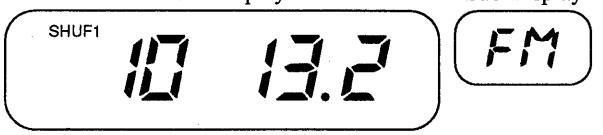
3. Push the preset [3] button.

Main Display / Sub Display



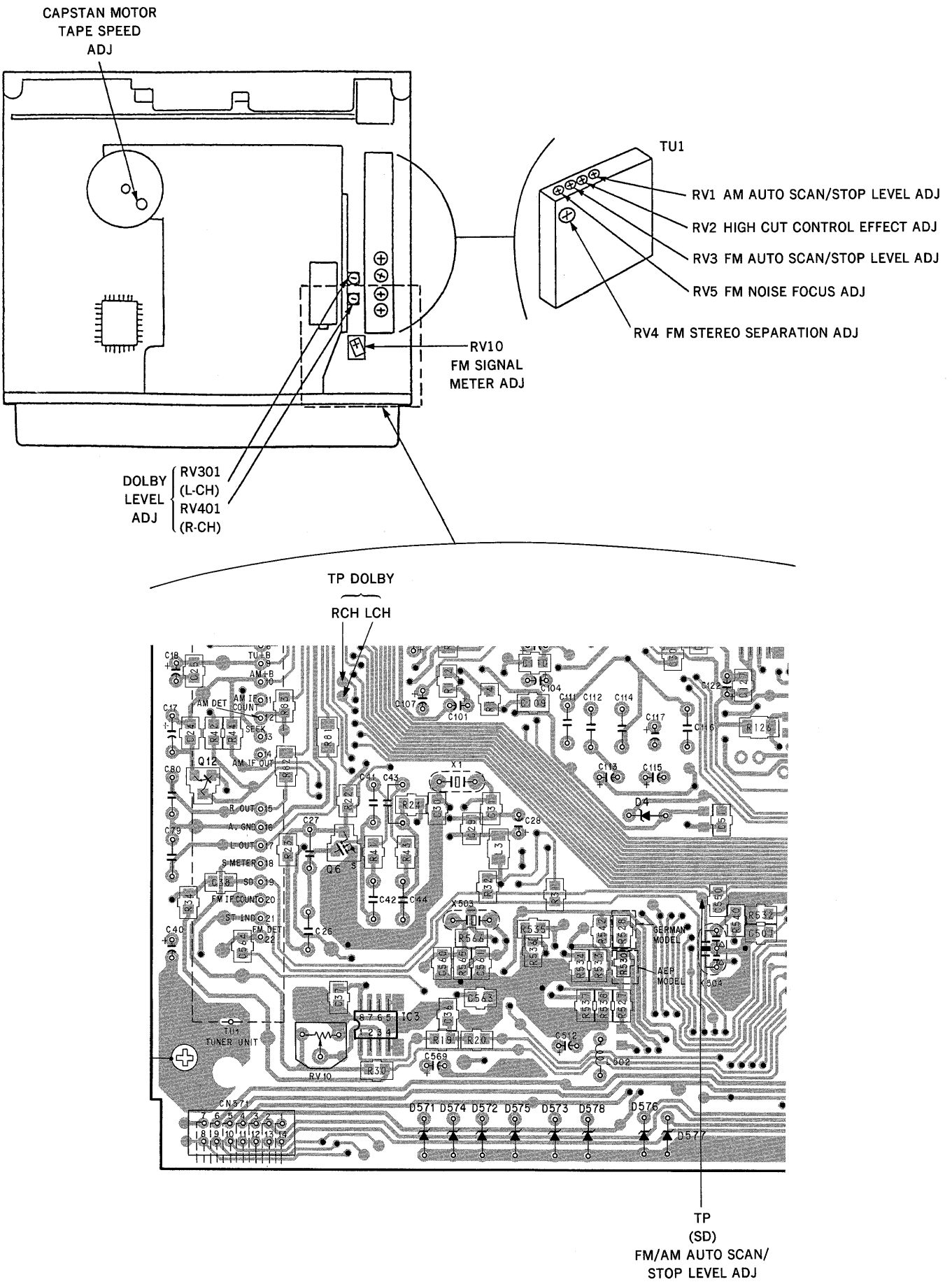
4. Push the [10] button.
5. Adjust RV10 so that the main display indication is "13.2".

Main Display / Sub Display



Specification : Main display indication : 13.0 to 13.4

Adjustment Location :



SECTION 5
DIAGRAMS

5-1. PIN FUNCTIONS

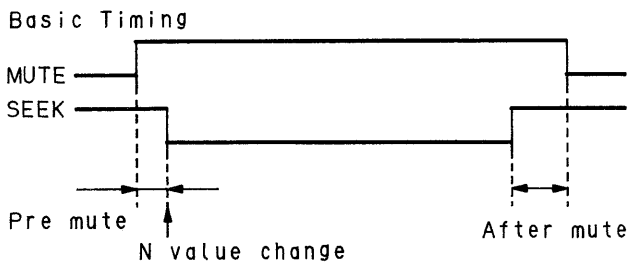
• IC501 μPD75518GF-131-3B9

Pin No.	Signal	Pin Name	I/O	Pin Function
1	KEY-IN0	KI0	I	KEY input
2	P-ON 5V (Ref)	AVDD	—	A/D reference voltage of KEY input.
3, 4	VDD	VDD	—	B/U 5V power
5	KEY-ACTIVE	KEY-ACT	I	ON for A/D port. H : Possible the KEY input.
6	P-ON	P-ON	O	When the POWER ON to output the H. To ON for AUDIO and AMP-REM.
7	ILL-ON	ILL-ON	O	When the ACC ON to output the H. To ON for illumination and LCD.
8	COLOR	COLOR	O	Select the illumination color. H : Green, L : Yellow
9	MUTE	MUTE	O	MUTING output. MUTE ON : H output
10	AUX-MUTE	AUX-MUTE	O	Not use
11	DOLBY $\overline{\text{OFF}}$/ON	DOLBY-$\overline{\text{OFF}}$/ON	O	ON/OFF signal output of DOLBY NR. ON : H, OFF : L
12	DOLBY $\overline{\text{B}}$/C	DOLBY-$\overline{\text{B}}$/C	O	Select signal output of DOLBY NR. (XR-U700RDS) Not use. Connect to +5V. (XR-U500RDS)
13	SUB-CLK	SUB. VOL-CLK	O	Not use
14	SUB-DATA	SUB. VOL-DATA	O	
15	SUB-CE	SUB. VOL-CE	O	
16	LCD-INH	LCD-INH	O	Control at LCD DRIVER IC701.
17	—	NC	—	GND
18	LCD-DATA	LCD-DATA	O	Control at LCD DRIVER IC701.
19	LCD-CLK	LCD-CLK	O	
20	LCD-CD	LCD-CD	O	
21	VOL-CE	VOL-CE	O	Control output at ELECTRONIC VOLUME IC101
22	AMP-ON	AMP-ON	O	Control output at POWER AMP IC901
23	VOL-CLK	CLK. OUT-VOL	O	Control output at ELECTRONIC VOLUME IC101
24	VOL-DATA	DATA. OUT-VOL	O	
25	TAPE MUTE	TAPE MUTE	O	When to MUTING for TAPE, output H.
26	METAL	MTL	O	METAL : H, NORMAL : L
27	LM-EJECT	EJECT	O	Control output at LOADING MOTOR. EJECT : H
28	LM-LOAD	LOAD	O	Control output at LOADING MOTOR. LOAD : H
29	POS 3	POS 3	I	TAPE POSITION detection input
30	POS 2	POS 2	I	
31	POS 1	POS 1	I	
32	POS 0	POS 0	I	
33	GND	GND	—	GND
34	REEL2	REEL 2	I	TAPE rotation detection input. Only one side input : Judge the no tape. Both no input : Judge the tape end.
35	REEL1	REEL 1	I	
36	N/$\overline{\text{R}}$	NOR/$\overline{\text{REV}}$	I	DIRECTION signal input of TAPE, H : Forward, L : Reverse
37	$\overline{\text{AMS IN}}$	$\overline{\text{AMS-IN}}$	I	AMS signal input. L : Tape sound is present, H : Tape sound is not present
38	PL-OUT	PL-OUT	O	Plunger drive control output. H : ON
39	CM-OUT	CM-OUT	O	For capstan motor output
40	SUB-VOL SELECT	$\overline{\text{SUB. VOL-SEL}}$	O	Select for SUB-VOL function. L : SUB VOL, H : None
41	T-POL	ST-IN	—	Normally, fixed L (GND).

Pin No.	Signal	Pin Name	I/O	Pin Function
42	SYSTEM RESET	$\overline{\text{SYS-RES}}$ UNI-L	O	For UNILINK output
43	BUS ON	$\overline{\text{BUS-ON}}$ UNI-L	O	
44	CLK-OUT	CLK-OUT	O	
45	BEEP	BEEP	O	Buzzer output
46	$\overline{\text{ACC-CHECK}}$	$\overline{\text{ACC-CHECK}}$	I	ACC detection input
47	KEY-ACKIN	$\overline{\text{KEY-ACK}}$	I	When the this set is sleep mode, detect to pressing key.
48	—	—	—	Not use. Connect to GND.
49	$\overline{\text{SIRCS IN}}$	$\overline{\text{SIRCS-IN}}$	I	Remote commander signal input
50	DATA IN	DATA-IN UNI. LINK	I	For UNILINK input/output
51	DATA OUT	DATA-OUT UNI. LINK	O	
52	CLK-IN	CLK-IN UNI-LINK	I	
53	B/U-CHECK	$\overline{\text{B/U-CHECK}}$	I	B+ voltage detection input
54	GND	GND	—	GND
55, 56	—	XT1, XT2	—	Not use
57	GND	IC	—	GND
58	X1	X1	O	Crystal oscillator connect pin (4.19MHz)
59	X2	X2	I	
60	$\overline{\text{RESET}}$	$\overline{\text{RESET-IN}}$	I	Microcomputer RESET input
61	ANT ON	ANT-REM	—	Not use
62—64	—	—	—	Not use
65	—	SD-IN	—	Fix the L (GND)
66	—	$\overline{\text{TEL. MUTE}}$	—	Telephone call detect pin. H : Mute −20dB audio signal
67	—	CAUTION-SEL	—	Fix the L (GND)
68	—	NOSE-SW	—	Nose presence detection pin
69, 70	—	MODE1, MODE2	—	Not use
71	AUDIO SEL 1	AUD. SEL. 1	—	
72	AUDIO SEL 2	AUD. SEL. 0	—	
73	A/D GND	ANALOG. GND	—	GND
74	EQ ON	EQ-ON	O	EQ control output. H : SUB and FAD control, L : No output
75	POWER SELECT	P. SEL-SW	I	P-SEL input. L : P-SEL OFF setting (to cope with cars without accessory position)
76	Joistick-IN2	JOYSTICK-IN2	I	Rotary commander input
77	Joistick-IN1	JOYSTICK-IN1	I	Rotary commander input
78	DSP	$\overline{\text{DSP}}$	I	DSP control select input. L : Use, H : Not use
79	TV	$\overline{\text{TV}}$	I	TV control select input. L : Use, H : Not use
80	KEY-IN1	KI1	I	KEY input

• **IC502 MN1882417SNU1**

Pin No.	Signal	Pin Name	I/O	Pin Function
1—6	P55—P50	RAM-A05—RAM-A00	O	S-RAM ADDRESS CONTROL output pins which connect with ADDRESS input pins of IC504 S-RAM LH5116N3.
7	VDD	VDD	I	Power input pin
8	OSC1	X1	—	Oscillator connecting pin (8MHz)
9	OSC2	X2	—	
10	VSS	GND	—	GND pin
11	XI	XTI	I	Not used (GND).
12	XO	XTO	O	Not used (OPEN).
13	EX2	EX2	—	Connected to GND.
14	$\overline{\text{RST}}$	$\overline{\text{RESET}}$	I	Reset input pin for input of $\overline{\text{RESET}}$ ANDed with $\overline{\text{SYSTEM-RESET}}$.
15	P26	RDS-CLK	I	RDS-CLK input pin which connects with CLK-OUT of IC506 RDS decoder, TDA7330BD.
16	P25	BU-CHECK	I	Input pin to detect BACK-UP detection, used for interrupt.
17	P24	BUS-ON	I	BUS INTERFACE bus ON input pin to detect ON/OFF of the bus, used for interrupt.
21—25	P77—P70	RAM-D7—RAM-D0	I/O	S-RAM DATA BUS input/output pins which connect with DATA pins of IC504 S-RAM LH5116N3.
26	P47	RAM-RE	O	S-RAM READ ENABLE output pin which connects with $\overline{\text{OE}}$ pin of IC504 S-RAM LH5116N3.
27	P46	RAM-WE	O	S-RAM WRITE ENABLE output pin which connects with $\overline{\text{WE}}$ pin of IC504 S-RAM LH5116N3.
28	P45	TERM	—	Not used (OPEN).
29	P44	R/W	—	
30	P95	RDS-DATA	I	RDS-DATA input pin which connects with DATA output pin of IC506 RDS decoder, TDA7330BD.
31	P94	DEV-SENS	I	Not used (OPEN).
32—35	P43—P40	S3—S0	O	
36, 37	P22, P21	——	I	Not used (GND).
38	P20	PLL-DI	I	PLL DATA input pin which connects with DATA-OUT pin of IC2 PLL LC7216M.
39	P17	PLL-DO	O	PLL DATA output pin which connects with DATA-IN pin of IC2 PLL LC7216M.
40	P16	PLL-CLK	O	PLL CLK output pin which connects with CLK-IN pin of IC2 PLL LC7216M.
41	P15	PLL-CE	O	PLL CE output pin which connects with CE-IN pin of IC2 PLL LC7216M.
42	P14	REQUEST	O	BUS INTERFACE REQUEST pin which sends "H" signal for request to communicate.
43	P13	LINK-OFF	O	BUS INTERFACE INT-LINK pin which is set "H" during LINK-OFF and "L" when the bus is connected.
44	P12	SCK	I	BUS INTERFACE CLK-IN pin.
45	P11	SI	I	BUS INTERFACE DATA-IN pin.
46	P10	SO	O	BUS INTERFACE DATA-OUT pin.
47	VDD	VDD	—	Power pin
48	AVDD	AVDD	—	AD input port power pin which is shorted with pin ㊼, VDD.

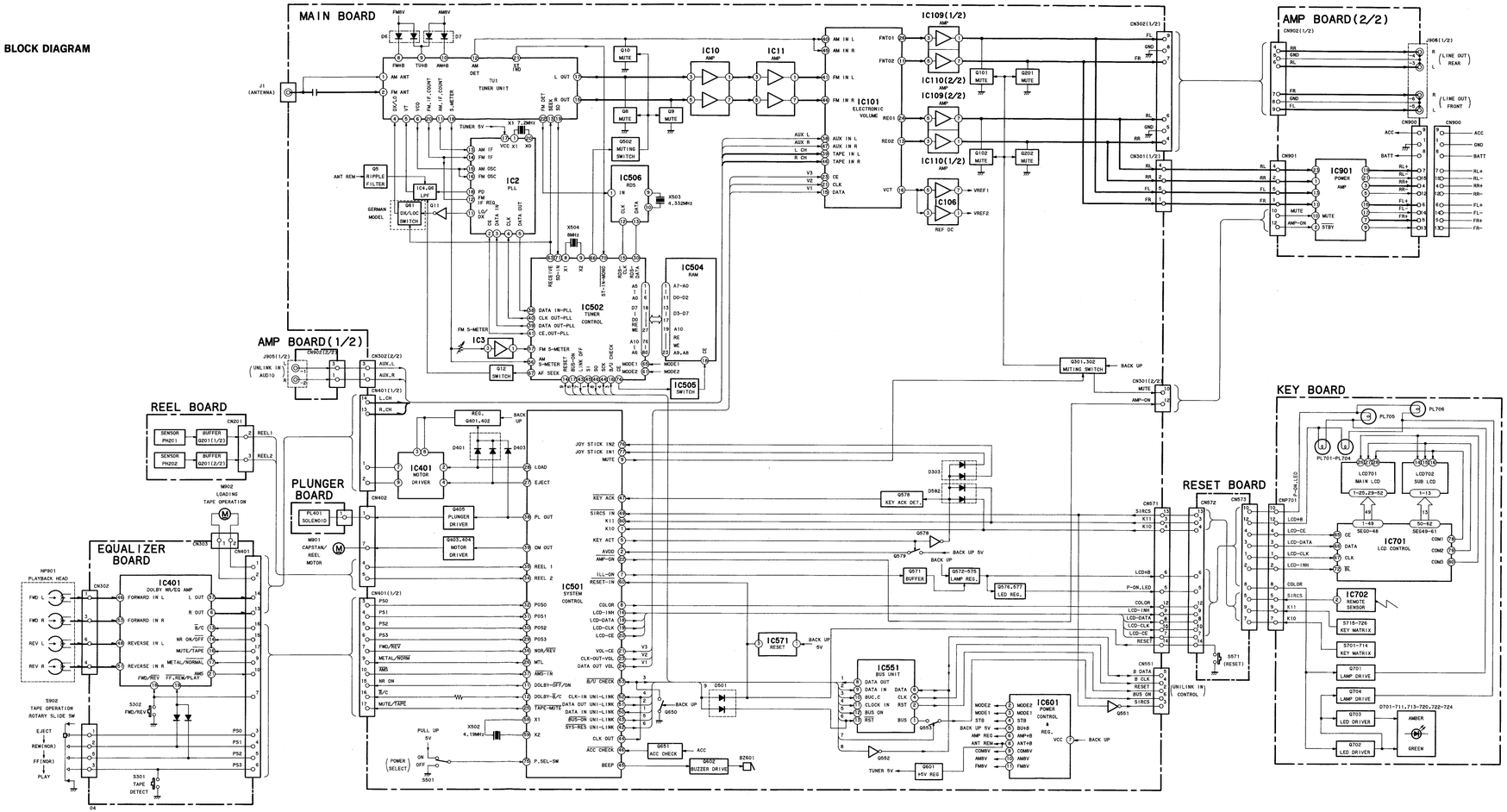
<table>
<tr><th>Pin No.</th><th>Signal</th><th>Pin Name</th><th>I/O</th><th>Pin Function</th></tr>
<tr><td>49</td><td>VREF</td><td>VREF+</td><td>I</td><td>AD port reference voltage input (positive side) which is supplied from AVREF of MASTER micro computer.</td></tr>
<tr><td>50—53</td><td>AD7—AD4</td><td>——</td><td>—</td><td>Not used (GND).</td></tr>
<tr><td>54
55</td><td>AD3
AD2</td><td>DIST-SEL1
DIST-SEL0</td><td>I
I</td><td>MODE select input used for setting of band selection, read when the port is reset.
<table>
<tr><th>SEL0</th><th>SEL1</th><th>BAND</th></tr>
<tr><td>L</td><td>L</td><td>FM+MW+LW</td></tr>
<tr><td>L</td><td>H</td><td>FM+MW+SW</td></tr>
<tr><td>H</td><td>L</td><td>FM+AM</td></tr>
<tr><td>H</td><td>H</td><td>FM+AM</td></tr>
</table></td></tr>
<tr><td>56</td><td>AD1</td><td>AM-VSM</td><td>I</td><td rowspan="2">AM (MW, SW, LW)/FM S meter voltage detection pins, used for BTM and RDS (AF: NETWORK) functions.</td></tr>
<tr><td>57</td><td>AD0</td><td>FM-VSM</td><td>I</td></tr>
<tr><td>58</td><td>VREF</td><td>VREF−</td><td>—</td><td>AD port reference voltage input (negative side).</td></tr>
<tr><td>59</td><td>AVSS</td><td>AVSS</td><td>—</td><td>AD input port GND pin which is shorted with pin ⑱, VREF−.</td></tr>
<tr><td>60</td><td>VSS</td><td>GND</td><td>—</td><td>Power GND.</td></tr>
<tr><td>61</td><td>P37</td><td>TUNER-ON</td><td>O</td><td>TUNER-ON output pin which sends “H” signal while tuner is ON.</td></tr>
<tr><td>62</td><td>P36</td><td>DX/LO</td><td>O</td><td>Not used (OPEN).</td></tr>
<tr><td>63</td><td>P35</td><td>RECEIVE</td><td>O</td><td>SEEK OUT output pin (RECEIVE)
Also used for SEEK for AM (MW, LW, SW), STOP REQUEST (IF count output request) and AGC cut in BTM mode. In FM mode, this pin is used for SEEK, BTM and AF operation network search , EON-TA search, CX1X retrieval and PTY search and it is used to change the time constant of S meter output. It is active “L”, “H” during receive and “L” when the tuner is turned OFF.
 
</td></tr>
<tr><td>64</td><td>P34</td><td>AM-ON</td><td>O</td><td>Not used (OPEN).</td></tr>
<tr><td>65</td><td>P33</td><td>FM-ON</td><td>O</td><td>FM-ON output pin which sends “H” signal in FM mode (for both PLAYING and BIHIND).</td></tr>
<tr><td>66</td><td>P32</td><td>TUNER-MUTE</td><td>O</td><td>Mute output pin</td></tr>
<tr><td>67</td><td>P31</td><td>AF-SEEK</td><td>O</td><td>AF-SEEK output pin
This pin is used for FM band AF operation network search, EON-TA search, CX1X retrieval, and PTY search and it is used to change the time constant of low-pass filter. It is active “H” and set “L” when the tuner is turned OFF in AM mode.</td></tr>
<tr><td>68</td><td>P30</td><td>SRAM</td><td>O</td><td>External S-RAM control output pin which sends “H” signal in CPU operations.</td></tr>
<tr><td>69</td><td>P67</td><td>A15</td><td>O</td><td>Not used (OPEN).</td></tr>
<tr><td>70</td><td>P93</td><td>ST-IN-$\overline{\text{MONO}}$</td><td>I/O</td><td>Pin used for both ST-IND display input and forced MONO output. “L” input to this pin will turn stereo display ON. It provides “L” output for forced Monaural output.</td></tr>
</table>

Pin No.	Signal	Pin Name	I/O	Pin Function
71	P92	SD-IN	I	Used to determine the stop level of SEEK, AUTO-MEMORY, SCAN, etc.
72, 73	P66, P65	A14, A15	O	Not used (OPEN).
74	P64	RAM-CE	O	Connected to $\overline{CE}$ pin of IC504 S-RAM LH5116N3.
75	P63	——	—	Not used (OPEN).
76—78	P62—P60	RAM-A10—RAM-A08	O	S-RAM ADDRESS CONTROL output pins.
79, 80	P57, P56	RAM-A07—RAM-A06	O	Connected to ADDRESS pins of IC504 S-RAM LH5116N3.

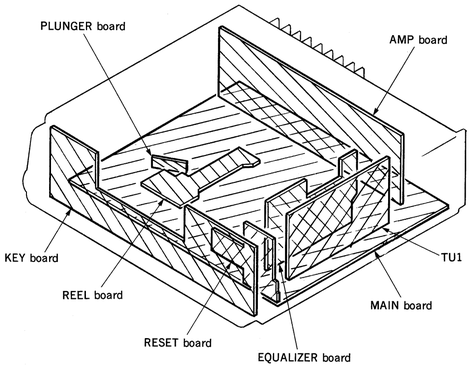
• IC2 LC7216M

Pin No.	Signal	Pin Name	I/O	Pin Function
1	XIN	XIN	I	Crystal oscillator connecting pin (7.2MHz).
2	CE	CE	I	Chip Enable input pin which connects with PLL-CE of IC502 tuner microcomputer, MN1882417.
3	DI	DATAIN	I	Data input pin which connects with PLL-DO of IC502 tuner microcomputer, MN1882417.
4	CL	CLK	I	Clock input pin which connects with PLL-CLK of IC502 tuner microcomputer, MN1882417.
5	D0	DATAOUT	O	Data output pin which connects with PLL-DI of IC502 tuner microcomputer, MN1882417.
6—10	——	—	—	Not used (OPEN).
11	OUT4	DX/$\overline{LO}$	O	DX/$\overline{LO}$ changeover output pin which sends "L" signal for LOCAL mode.
12	OUT5	FM-IF-REQ	O	FM IF COUNT request output pin. This pin sends "H" signal when IF count of FM band is performed. It provides "H" output only for operations that require IF count, such as SEEK and BTM. It provides "L" output in AM mode and for TUNER OFF.
13	LCTR	AM-IF $\overline{MONO}$	I	General purpose counter frequency measuring signal input pin. SC=0, SF=1, AM IF counter 15 to 500kHz.
14	HCTR	FM-IF	I	General purpose counter frequency measuring signal input pin. SC=1, FM IF count 10 to 60MHz.
15	AMIN	AM-OSC	I	AM OSC signal input pin. DV=0, 2—40MHz : SP=1, 0.5—10MHz : SP=0.
16	FMIN	FM-OSC	I	FM OSC signal input pin. DV=0, 10—130MHz.
17	VCC	VCC	—	Power pin
18	PD	PD	O	Charge pump output pin
19	VSS	VSS	—	GND pin
20	XOUT	XOUT	O	Crystal oscillator connecting pin (7.2MHz).

5-2. BLOCK DIAGRAM



5-3. CIRCUIT BOARDS LOCATION



5-5. SCHEMATIC DIAGRAM —MAIN SECTION— • Refer to page 55 for IC Block Diagrams.

Note:
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantaliums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- △ : internal component.
- Power voltage is dc 14.4V and fed with regulated dc power supply from BATT and ACC terminals.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : MW
  < > : PB
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM ⇨ : PB

[MAIN BOARD]

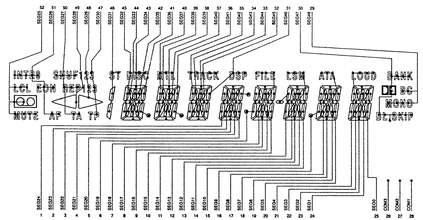
[EQUALIZER BOARD]

[REEL BOARD]

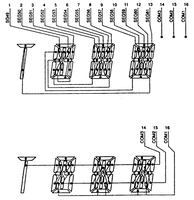
[PLUNGER BOARD]

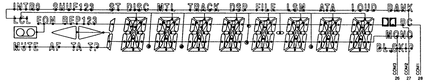
To AMP BOARD CN902 (See page 48.)
To AMP BOARD CN901 (See page 49.)
To RESET BOARD CN572 (See page 50.)

• LCD701 (MAIN)

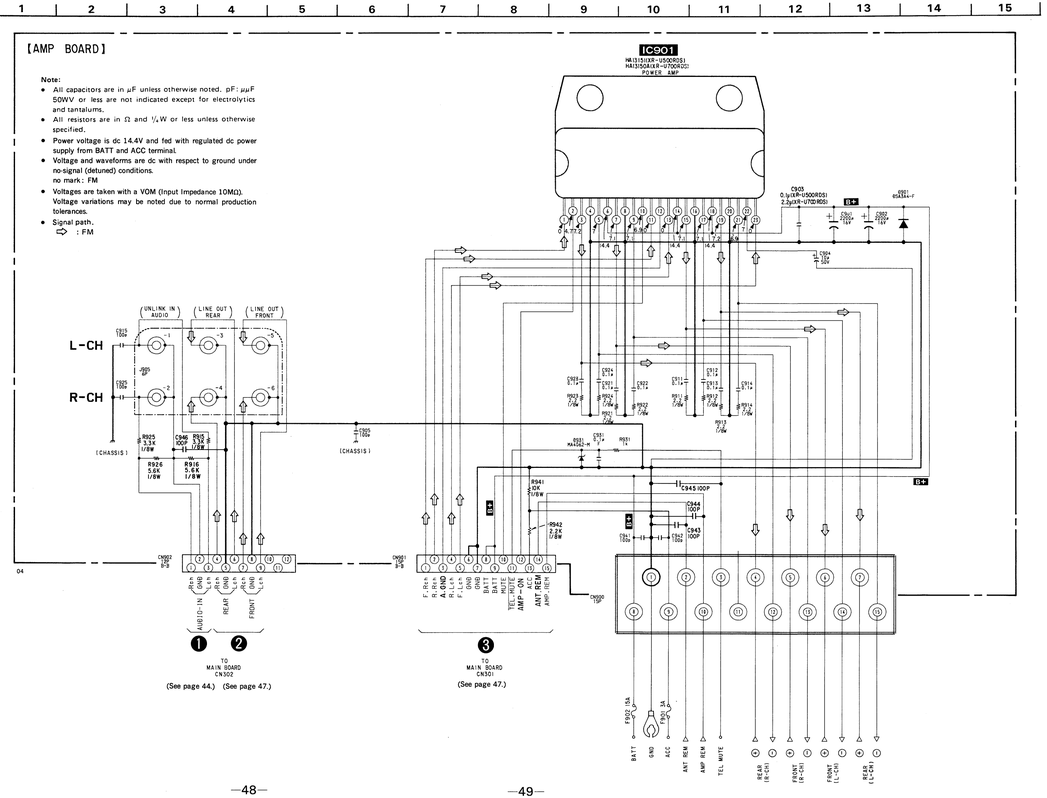


• LCD702 (SUB)

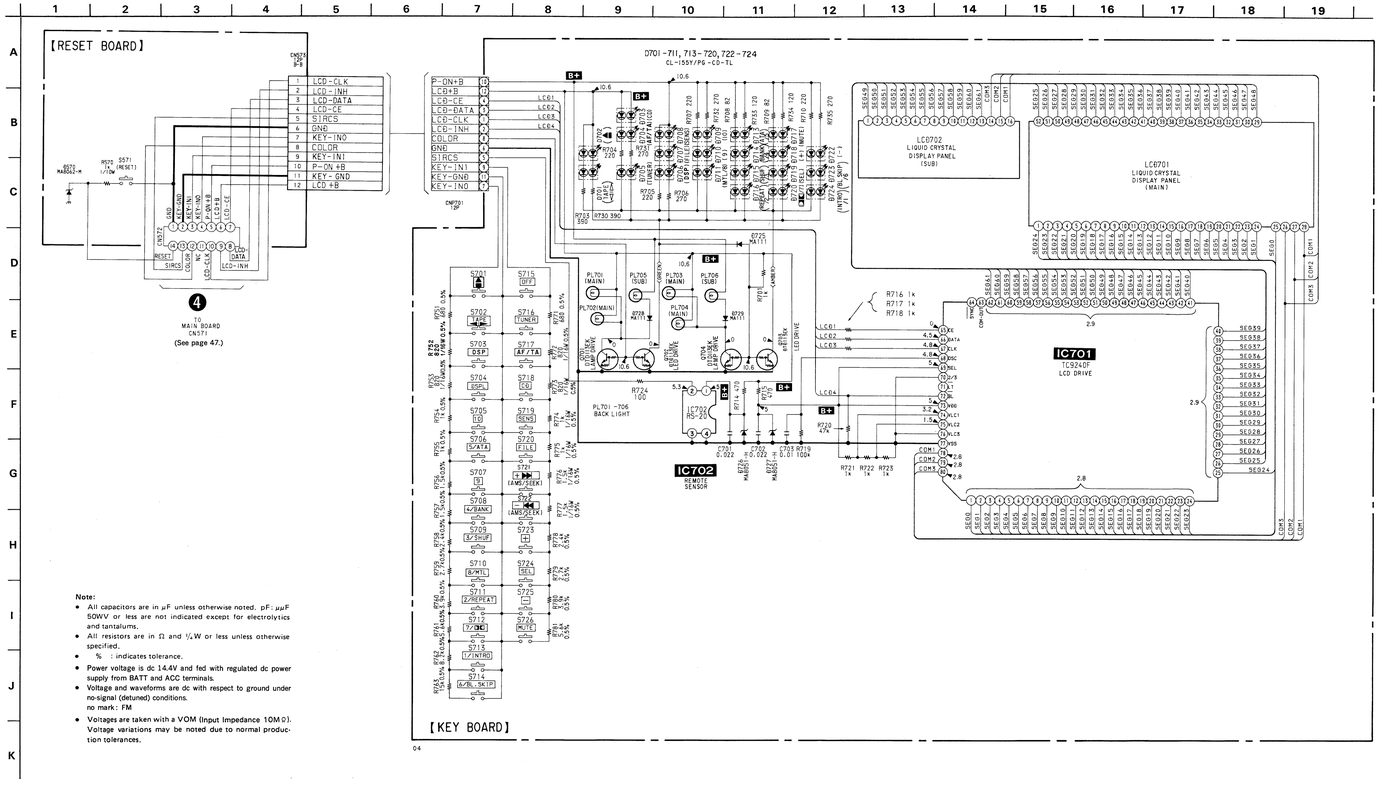




5-6. SCHEMATIC DIAGRAM —AMP SECTION—

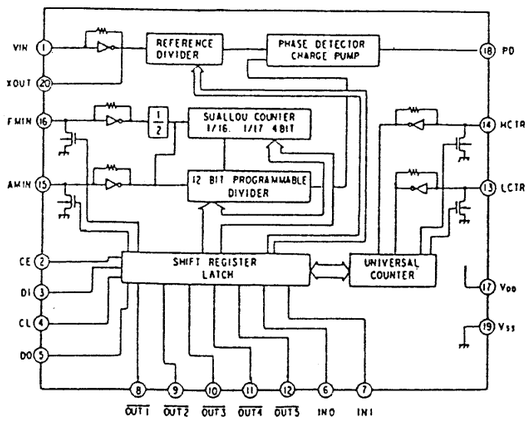

【AMP BOARD】
Note:
• All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
• All resistors are in Ω and ¼W or less unless otherwise specified.
• Power voltage is dc 14.4V and fed with regulated dc power supply from BATT and ACC terminal.
• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark: FM
• Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
• Signal path.
⇨ : FM
IC901
M61315SP-(500RDS)
M61315GA(R-U700RDS)
POWER AMP
L-CH
R-CH
UNLINK IN AUDIO
LINE OUT REAR
LINE OUT FRONT
[CHASSIS]
TO MAIN BOARD CN302
(See page 44.) (See page 47.)
TO MAIN BOARD CN301
(See page 47.)
BATT
GND
ACC
ANT REM
AMP REM
TEL MUTE
REAR (R-CH)
FRONT (R-CH)
FRONT (L-CH)
REAR (L-CH)

5-7. SCHEMATIC DIAGRAM —PANEL SECTION—

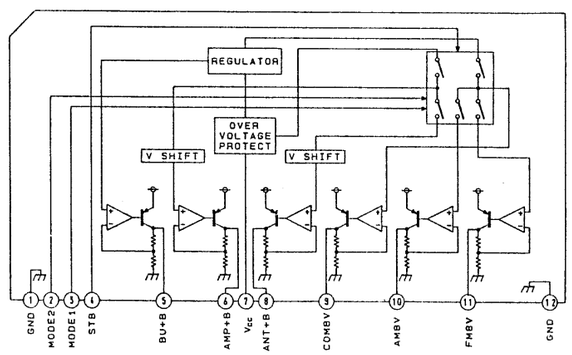

【RESET BOARD】
LCD-CLK
LCD-INH
LCD-DATA
LCD-CE
STRCS
GND
KEY-IN0
COLOR
KEY-IN1
P-ON+B
KEY-GND
LCD+B
TO MAIN BOARD CN571
(See page 47.)
D701-711, 713-720, 722-724
CL-155Y/PG-CO-TL
LCD702 LIQUID CRYSTAL DISPLAY PANEL (SUB)
LCD701 LIQUID CRYSTAL DISPLAY PANEL (MAIN)
IC701 TC9240F LCD DRIVE
IC702 REMOTE SENSOR
PL701-706 BACK LIGHT
【KEY BOARD】
Note:
• All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
• All resistors are in Ω and ¼W or less unless otherwise specified.
• % : indicates tolerance.
• Power voltage is dc 14.4V and fed with regulated dc power supply from BATT and ACC terminals.
• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark: FM
• Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.

• IC Block Diagrams

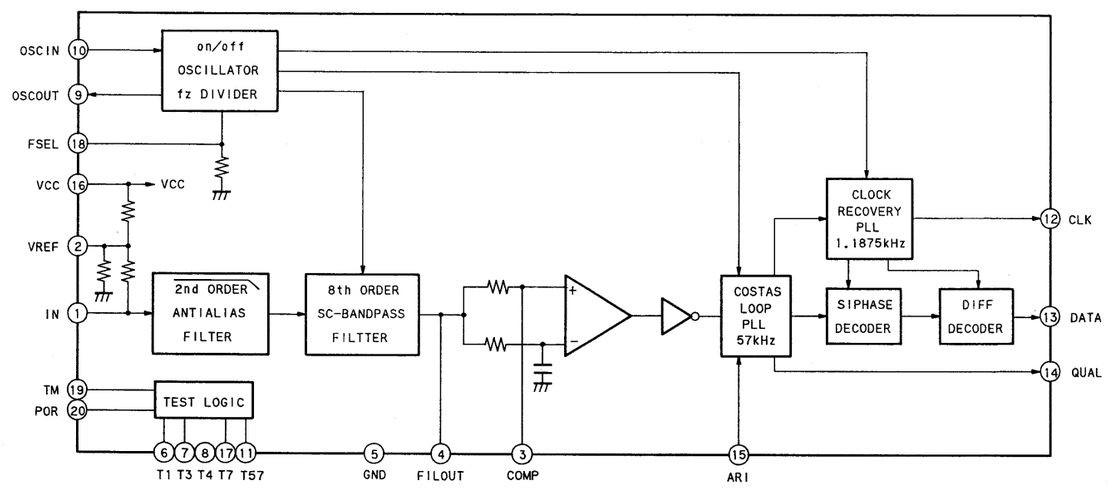
IC2 LC7216M



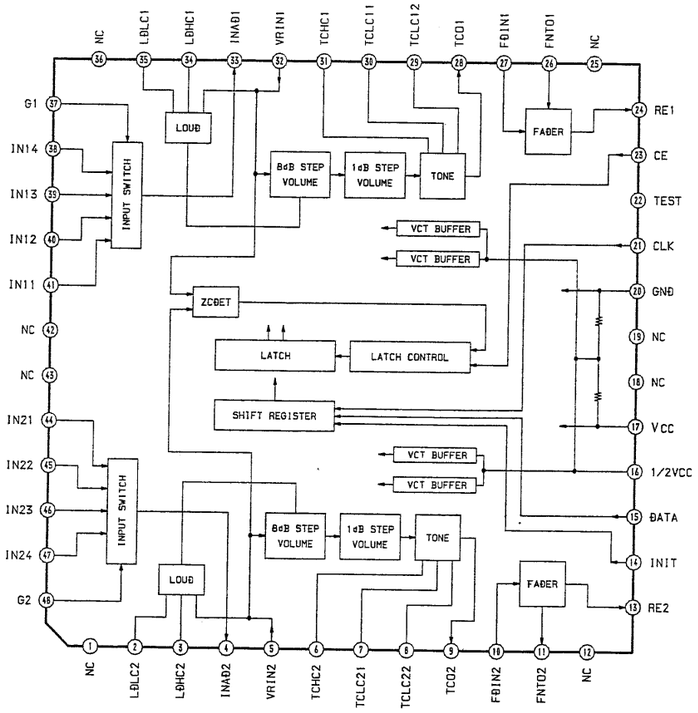
IC601 BA3910A-V2



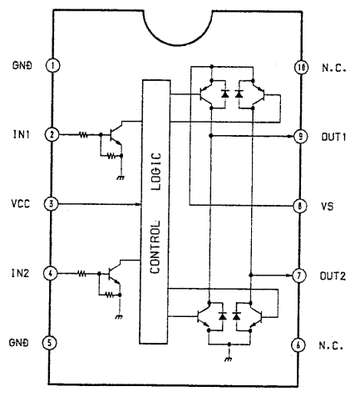
IC506 TDA7330BD



IC101 CXA1646Q

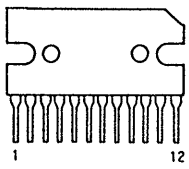


IC401 LB1638M

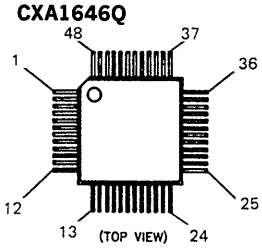


5-9. SEMICONDUCTOR LEAD LAYOUTS

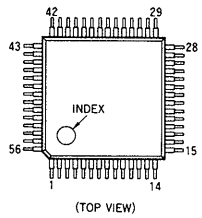
BA3910B-V2



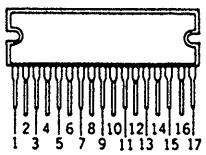
CXA1646Q



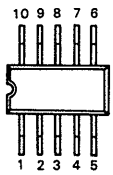
HA12164
HA12174



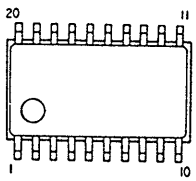
HA13150A
HA13151



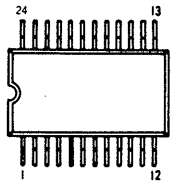
LB1638M



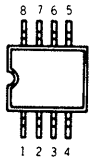
LC7216M



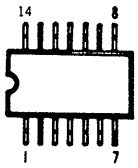
LH5116N3



LM358D
RC4558DR-A
TC4W66F



MM1175XFF



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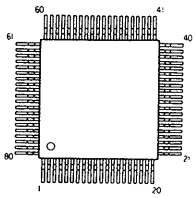

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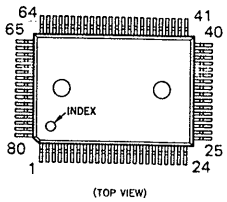

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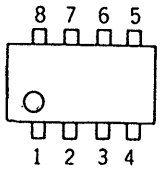
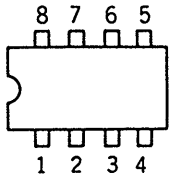


NJM5532M



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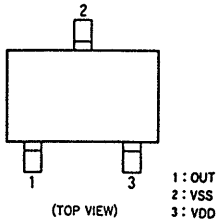
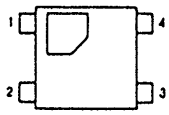


RS-30



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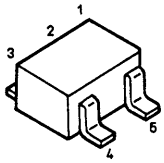

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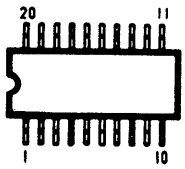

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UN5111
UN5113
UN5211
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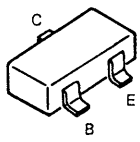
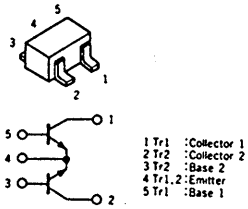
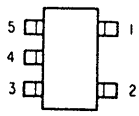
2SC4116-GL



FMG1
XN1213



UPA502T-T1
XN1A312-TX



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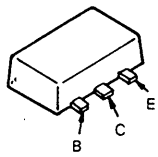

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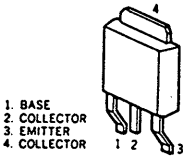

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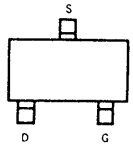

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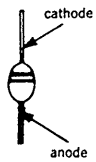
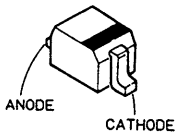
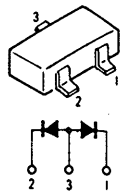


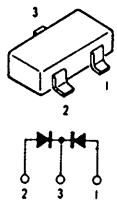
MA111
MA8051-H
MA8062-M



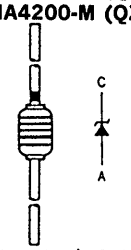
MA142WA
MA721WA-TX
1SS181



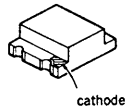
MA141WK
MA142WK
MA152WK



MA4039-M (QZ)
MA4056-M (QZ)
MA4062-M (QZ)
MA4068-L (QZ)
MA4075-M (QZ)
MA4091-H (QZ)
MA4110-M (QZ)
MA4160-M (QZ)
MA4200-M (QZ)



CL-155Y/PG-CD

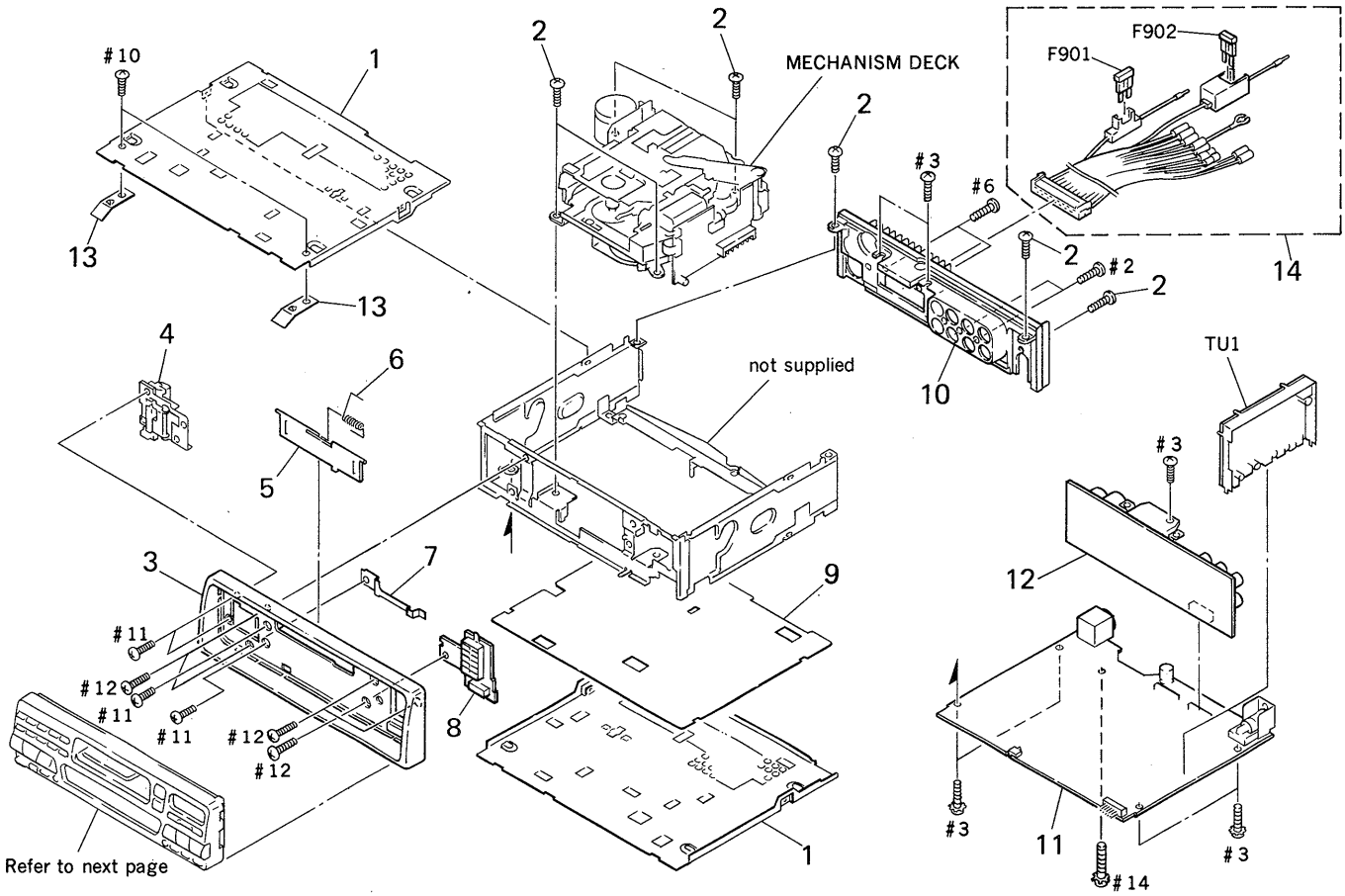


SECTION 6
EXPLODED VIEWS

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE)... (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Hardware (# mark) list is given in the last of this parts list.

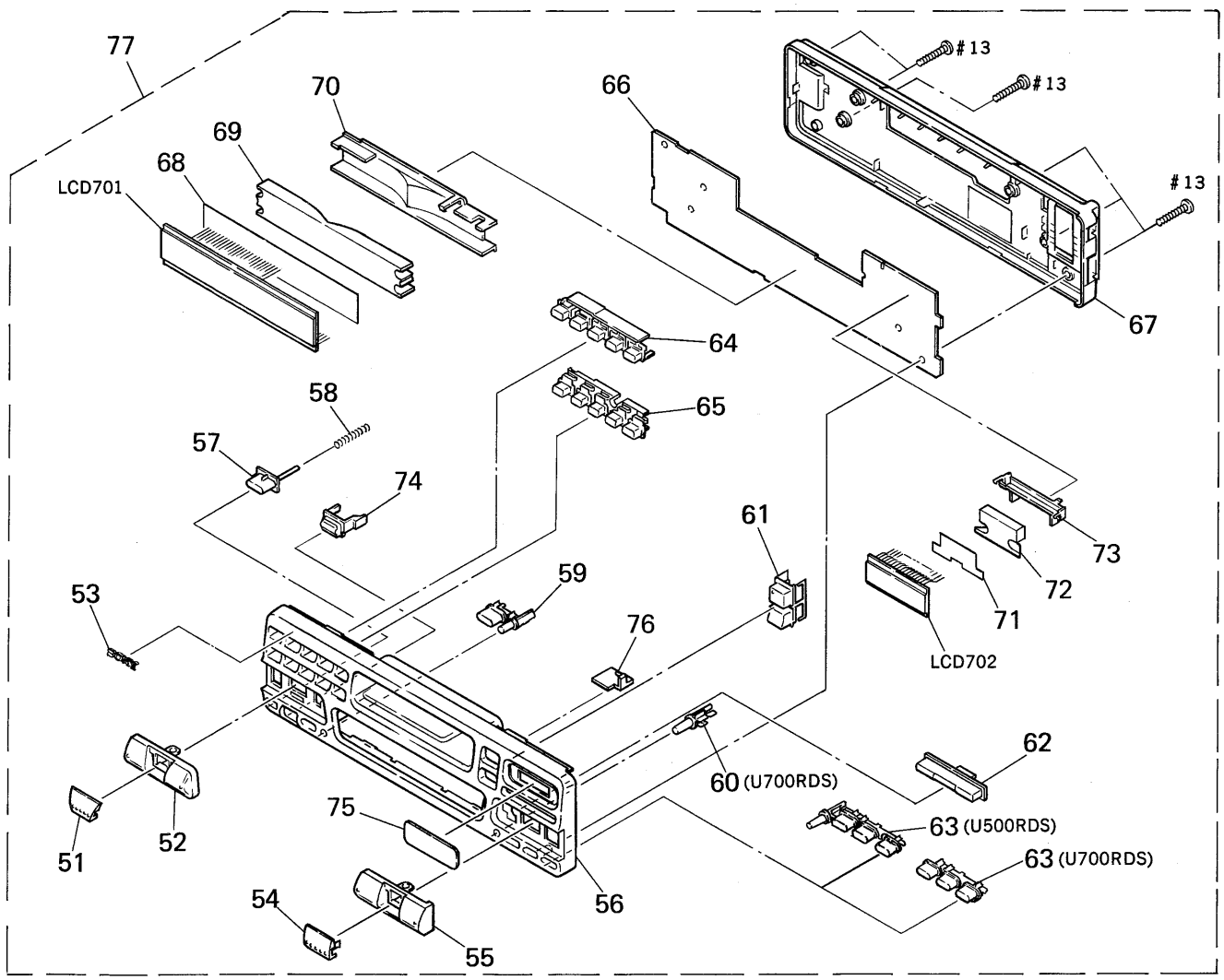
6-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
* 1	3-904-249-01	COVER	
2	3-905-560-01	SCREW (2.6X6) (CU), +PTT	
3	3-904-179-01	PANEL, SUB	
4	X-3366-931-1	LOCK ASSY	
5	3-389-269-11	DOOR, CASSETTE (XR-U700RDS:AEP)	
5	3-389-269-21	DOOR, CASSETTE (XR-U700RDS:GERMAN)	
5	3-389-269-71	DOOR, CASSETTE (XR-U500RDS:AEP)	
5	3-389-269-81	DOOR, CASSETTE (XR-U500RDS:GERMAN)	
6	3-377-892-01	SPRING (C DOOR), TORSION	
7	3-904-181-01	SPRING (SW)	
* 8	1-648-609-11	RESET BOARD	
* 9	3-904-180-01	INSULATOR	

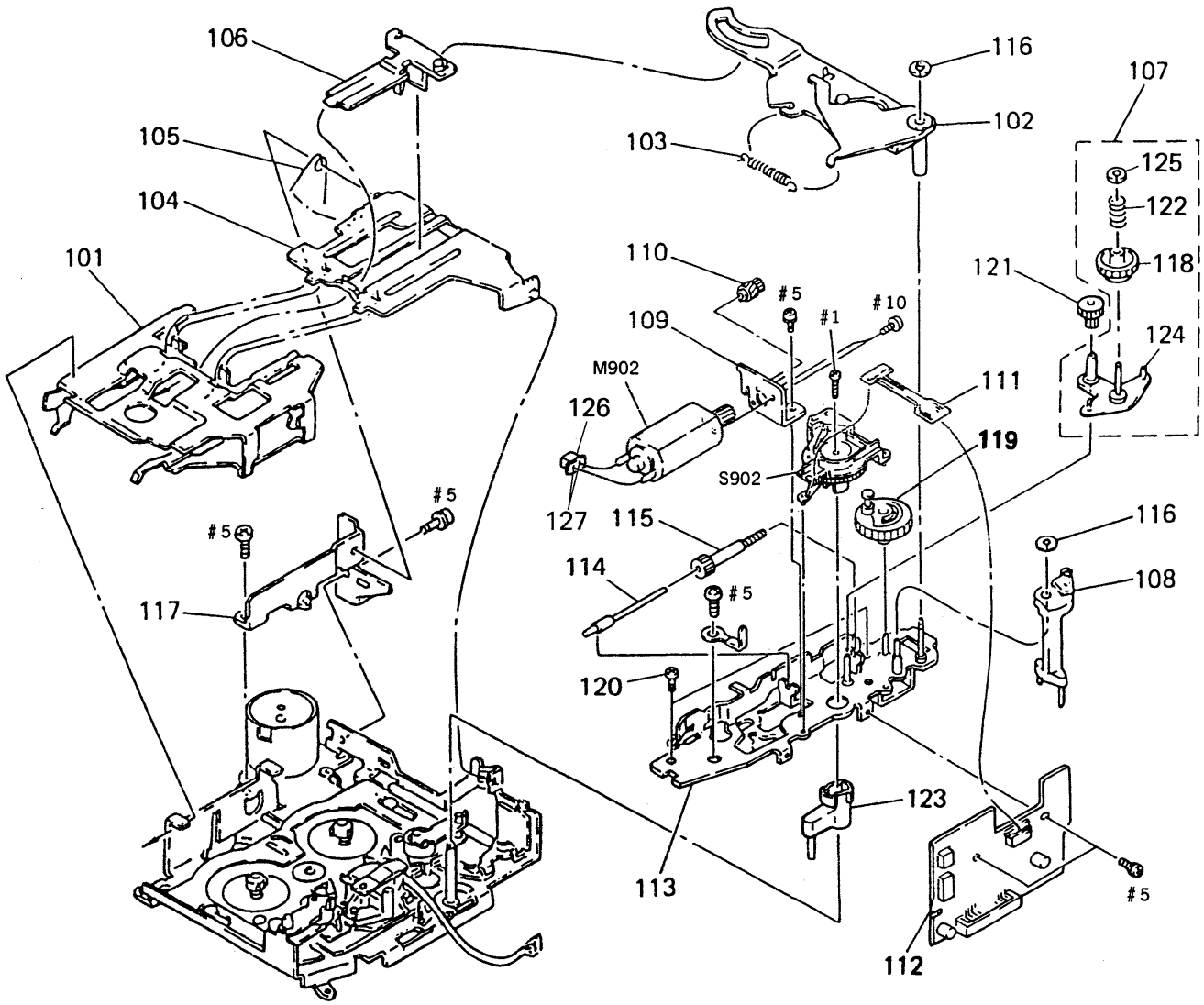
Ref. No.	Part No.	Description	Remark
* 10	3-388-866-01	HEAT SINK	
* 11	A-3295-638-A	MAIN BOARD, COMPLETE (XR-U700RDS:AEP)	
* 11	A-3295-646-A	MAIN BOARD, COMPLETE (XR-U500RDS:AEP)	
* 11	A-3295-658-A	MAIN BOARD, COMPLETE (XR-U700RDS:GERMAN)	
* 11	A-3295-659-A	MAIN BOARD, COMPLETE (XR-U500RDS:GERMAN)	
* 12	A-3295-642-A	AMP BOARD, COMPLETE (XR-U700RDS)	
* 12	A-3295-648-A	AMP BOARD, COMPLETE (XR-U500RDS)	
* 13	3-386-597-01	PLATE, LOCK	
14	1-751-263-41	CORD (WITH CONNECTOR)	
F901	1-533-326-11	FUSE (BLADE TYPE) (AUTO FUSE) (3A)	
F902	1-533-331-11	FUSE (BLADE TYPE) (AUTO FUSE) (15A)	
* TU1	A-3282-003-A	TUNER UNIT (TUX-001A)	

6-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	3-389-660-11	BUTTON (SELECT)	
52	3-389-668-11	BUTTON (+ -)	
53	3-904-194-01	EMBLEM (NO. 2.5), SONY	
54	3-389-664-31	BUTTON (AF/TA)	
55	3-389-666-11	BUTTON (TUNER, CD)	
56	3-904-190-11	PANEL (B), FRONT (XR-U700RDS)	
56	3-904-190-31	PANEL (B), FRONT (XR-U500RDS)	
57	3-904-245-01	BUTTON (RELEASE)	
58	3-904-193-01	SPRING (RELEASE)	
59	3-904-243-11	BUTTON (MUTE)	
60	3-904-244-01	BUTTON (DSPL) (XR-U700RDS)	
61	3-389-661-11	BUTTON (⏏, TAPE ◁▯▷)	
62	3-389-665-11	BUTTON (AMS/SEEK ⏮ -, + ⏭)	
63	3-389-670-01	BUTTON (DSPL, DSP, FILE, SENS) (XR-U500RDS)	
63	3-389-671-01	BUTTON (DSP, FILE, SENS) (XR-U700RDS)	
64	3-389-658-11	BUTTON (1-5)	
65	3-389-662-11	BUTTON (6-10)	
* 66	A-3222-612-A	KEY BOARD, COMPLETE	
67	3-904-191-01	PANEL, FRONT BACK	
* 68	3-389-753-01	REFLECTOR (MAIN), SHEET	
* 69	3-389-673-01	PLATE (MAIN:LCD), LIGHT GUIDE	
* 70	3-389-672-01	HOLDER (MAIN:LCD)	
* 71	3-904-248-01	REFLECTOR (SUB), SHEET	
* 72	3-904-247-01	PLATE (SUB:LCD), LIGHT GUIDE	
* 73	3-904-246-01	HOLDER (SUB:LCD)	
74	3-389-669-01	FILTER (RAY CATCHER)	
75	3-389-674-02	PLATE (B), INDICATION	
76	3-904-632-01	PLATE (C DOOR), LIGHT GUIDE	
* 77	A-3252-736-A	PANEL ASSY, FRONT (XR-U700RDS)	
* 77	A-3252-739-A	PANEL ASSY, FRONT (XR-U500RDS)	
LCD701	1-810-094-11	DISPLAY PANEL, LIQUID CRYSTAL (MAIN)	
LCD702	1-810-095-11	DISPLAY PANEL, LIQUID CRYSTAL (SUB)	

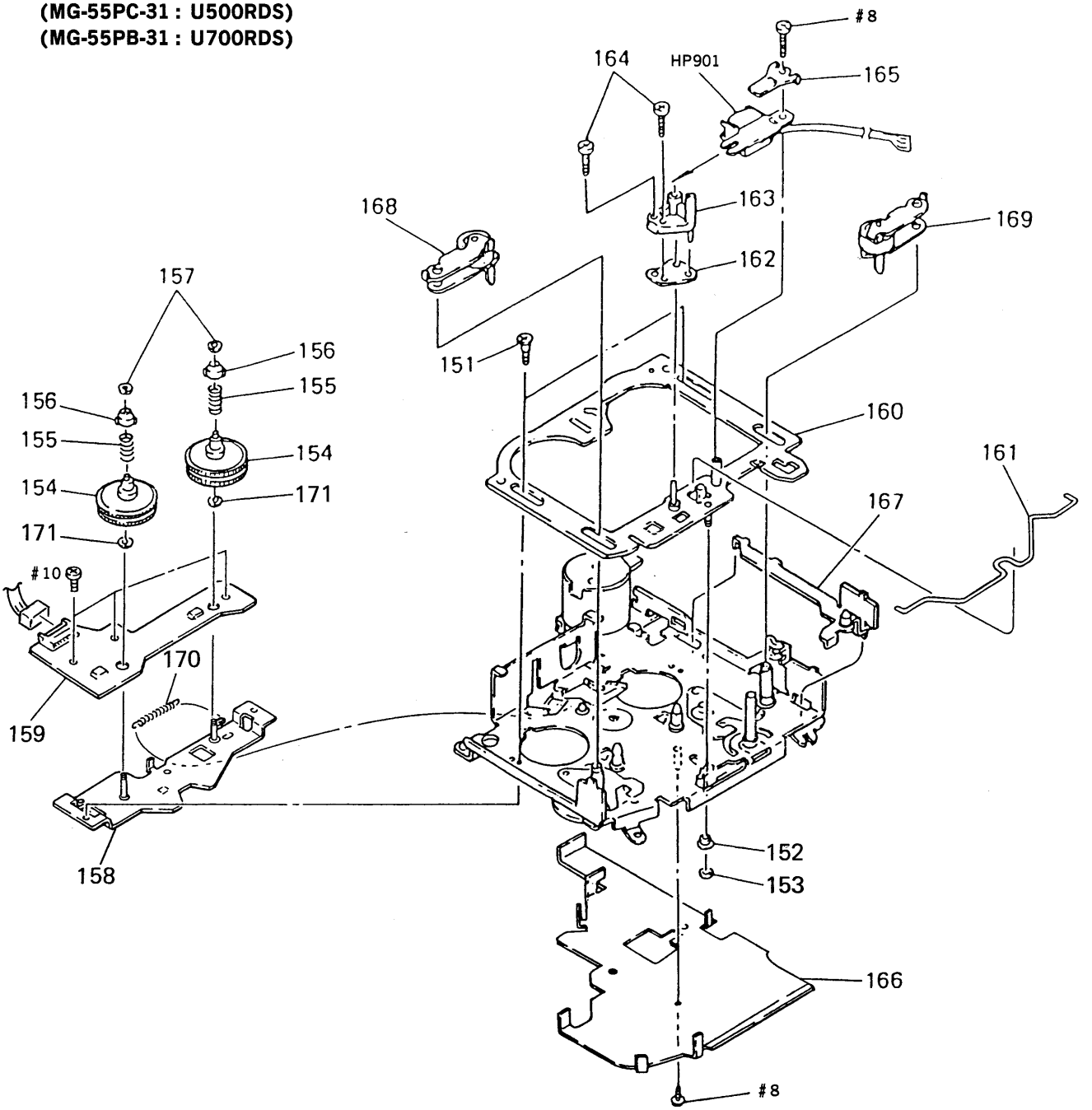
6-3. MECHANISM DECK SECTION 1
(MG-55PC-31 : U500RDS)
(MG-55PB-31 : U700RDS)



Ref. No.	Part No.	Description	Remark
* 101	3-344-103-21	HOUSING, CASSETTE	
* 102	X-3344-121-1	ARM ASSY, SUCTION	
103	3-344-216-01	SPRING (SUCTION ARM), TENSION	
* 104	X-3362-262-1	HANGER (F) ASSY, HOUSING	
105	3-344-113-03	SPRING	
* 106	3-389-166-01	CATCHER	
* 107	A-3239-954-A	GEAR ASSY, DRIVING ARM	
* 108	3-375-458-01	ARM (M), REVERSE	
* 109	X-3344-142-2	BRACKET (F) ASSY, MOTOR	
110	3-344-281-01	GEAR (A), DRIVING	
111	1-635-519-12	ROTARY SWITCH FLEXIBLE BOARD	
* 112	A-3295-492-A	EQUALIZER BOARD, COMPLETE (XR-U700RDS)	
* 112	A-3295-493-A	EQUALIZER BOARD, COMPLETE (XR-U500RDS)	
* 113	X-3362-260-3	CHASSIS (F) ASSY, MCU	
* 114	3-344-157-01	SHAFT, DRIVING GEAR (B)	

Ref. No.	Part No.	Description	Remark
115	3-344-156-01	GEAR (B), DRIVING	
116	3-344-222-01	WASHER	
* 117	3-368-239-13	BRACKET (U), HANGER	
118	3-344-165-02	GEAR (B), FRICTION	
119	X-3344-119-1	GEAR ASSY (L), LOADING	
120	3-703-502-21	SCREW	
121	3-389-165-01	GEAR (B), FRICTION	
122	3-344-137-01	SPRING, COMPRESSION	
123	X-3344-117-1	ARM ASSY (L), MODE	
124	X-3344-109-4	ARM ASSY, DRIVING	
125	3-662-058-00	WASHER, SLIT	
* 126	1-565-121-11	HOUSING, CONNECTOR 2P	
* 127	1-565-163-11	TERMINAL, SOLDERLESS	
M902	X-3362-826-1	MOTOR ASSY	
S902	1-572-397-11	SWITCH, ROTARY SLIDE (TAPE OPERATION)	

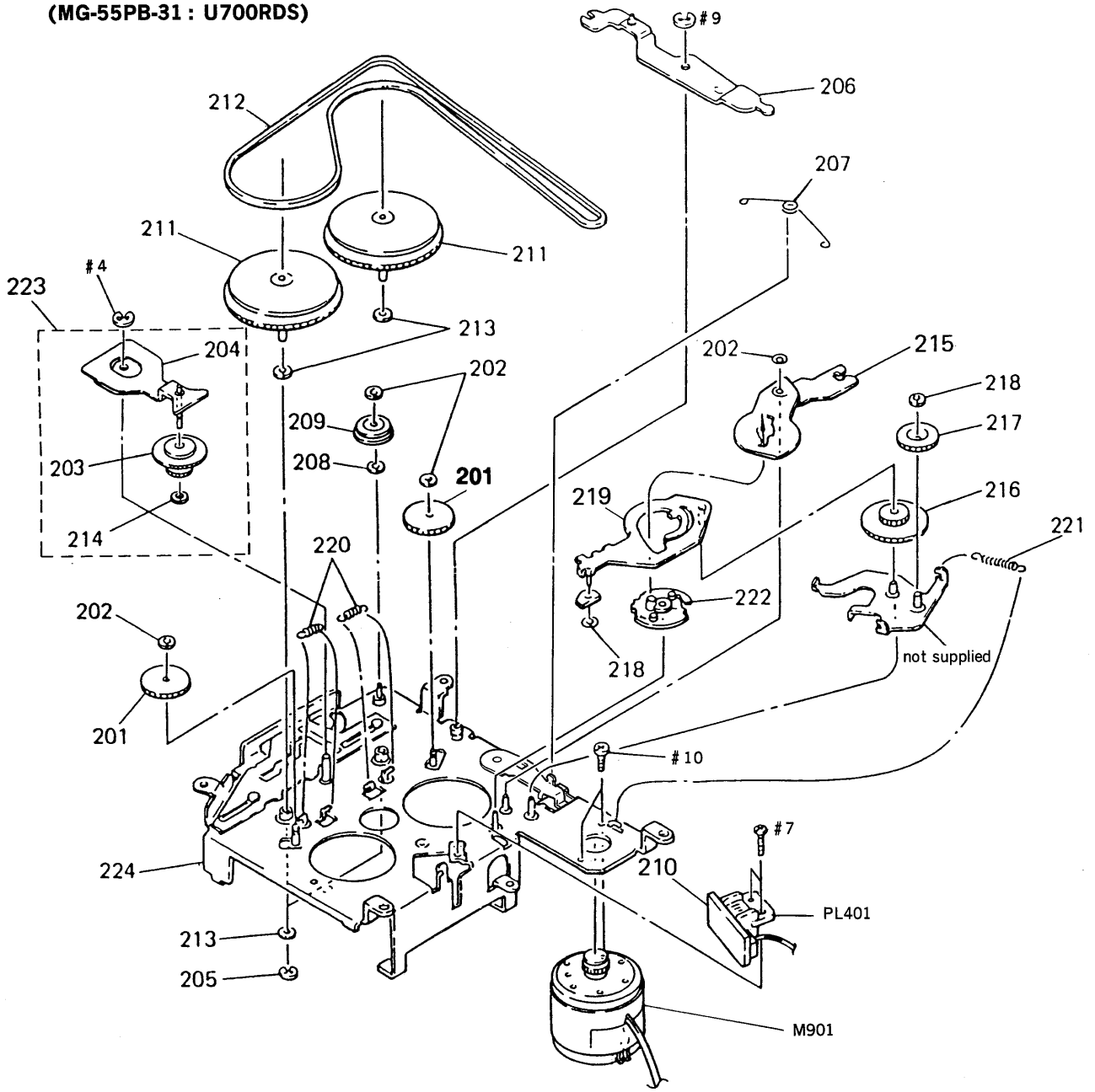
6-4. MECHANISM DECK SECTION 2
(MG-55PC-31 : U500RDS)
(MG-55PB-31 : U700RDS)



Ref. No.	Part No.	Description	Remark
151	3-344-110-01	SCREW (HB), STEP	
152	3-344-116-01	ROLLER (A), H/B	
153	3-344-222-01	WASHER	
154	X-3362-214-1	TABLE (F) ASSY, REEL	
155	3-344-143-01	SPRING (BT), COMPRESSION	
156	3-365-725-01	CAP (F), REEL	
157	3-364-151-01	WASHER	
* 158	X-3344-144-2	BRACKET (F) ASSY, REEL TABLE	
* 159	1-648-246-11	REEL BOARD	
* 160	X-3366-042-2	BASE ASSY (F), HEAD	
* 161	3-363-909-11	SPRING (R), PINCH PRESS	

Ref. No.	Part No.	Description	Remark
162	3-344-128-06	SEAM, DAH	
163	3-372-170-01	ARM, DAH	
164	3-364-122-01	SCREW (M1.4X5.5), ADJ	
165	3-344-130-04	RETAINER, HEAD	
* 166	3-344-220-01	COVER, MD	
* 167	3-382-483-01	LEVER (REVERSE JOINT)	
168	X-3344-115-1	ARM (R) ASSY, PINCH	
169	X-3344-116-1	ARM (F) ASSY, PINCH	
170	3-344-217-01	SPRING (CAM LOCK LEVER), TENSION	
171	3-701-437-01	POLY-SLIDER (A)	
HP901	1-543-726-41	HEAD, MAGNETIC (PLAYBACK)	

6-5. MECHANISM DECK SECTION 3
(MG-55PC-31 : U500RDS)
(MG-55PB-31 : U700RDS)



Ref. No.	Part No.	Description	Remark
201	3-376-927-01	GEAR (PLAY)	
202	3-344-222-01	WASHER	
203	X-3344-102-1	GEAR ASSY, FR	
* 204	X-3344-101-6	ARM ASSY, FR	
205	3-364-151-01	WASHER	
* 206	X-3344-139-3	ARM ASSY, POWER	
207	3-344-279-11	SPRING, BUFFER	
208	3-701-436-01	WASHER, 1.6	
209	3-371-905-01	PULLEY (M), MIDWAY (XR-U500RDS)	
209	3-371-971-01	PULLEY (P), MIDWAY (XR-U700RDS)	
* 210	1-648-247-11	PLUNGER BOARD	
211	3-386-047-01	FLYWHEEL (D) (XR-U700RDS)	
211	3-386-047-11	FLYWHEEL (D) (XR-U500RDS)	
212	3-387-987-01	BELT	
213	3-701-437-01	POLY-SLIDER (A)	
214	3-344-224-01	WASHER	
* 215	X-3344-114-1	LEVER ASSY, REVERSE	
216	3-389-172-01	GEAR (REVERSE-B)	
217	3-389-173-01	GEAR (REVERSE-A)	
218	3-344-223-01	WASHER	
219	X-3366-710-1	LEVER ASSY (F6), CAM LOCK	
220	3-344-218-02	SPRING (PLAY ARM), TENSION	
221	3-344-215-01	SPRING, TENSION	
222	3-344-119-01	GEAR, RVS CAM	
223	A-3239-947-A	GEAR SUB ASSY, FR	
* 224	X-3366-043-2	CHASSIS (L) ASSY, MECHANICAL	
M901	X-3344-136-3	MOTOR SUB ASSY, CAPSTAN	
PL401	1-454-461-11	SOLENOID, PLUNGER	

SECTION 7
ELECTRICAL PARTS LIST

AMP **EQUALIZER**

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u:μ, for example:
  uA ..: μA.. uPA..: μPA..
  uPB..: μPB.. uPC..: μPC.. uPD..: μPD..
- CAPACITORS
  uF: μF
- COILS
  uH: μH

When indicating parts by reference number, please include the board.

Ref.No.	Part No.	Description			Remark
*	A-3295-648-A	AMP BOARD, COMPLETE (XR-U500RDS)			
*	A-3295-642-A	AMP BOARD, COMPLETE (XR-U700RDS)			
		**********			
*	3-904-673-01	PLATE (HEAT SINK), GROUND			
	7-621-770-67	SCREW +PTT 2.6X6 (S) (XR-U500RDS)			
		< CAPACITOR >			
C901	1-104-889-91	ELECT	2200uF	20%	16V
C902	1-104-890-91	ELECT	2200uF	20%	16V
C903	1-136-165-00	FILM	0.1uF	5%	50V
		(XR-U500RDS)			
C903	1-104-646-91	CERAMIC	2.2uF	20%	50V
		(XR-U700RDS)			
C904	1-126-059-11	ELECT	10uF	20%	50V
C905	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C911-914					
	1-136-165-00	FILM	0.1uF	5%	50V
C915	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C921-924					
	1-136-165-00	FILM	0.1uF	5%	50V
C925	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C931	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C941-944					
	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C945	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C946	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
		< CONNECTOR >			
* CN900	1-695-244-21	PLUG, CONNECTOR 15P			
CN901	1-695-201-21	PLUG, CONNECTOR 15P			
* CN902	1-580-914-11	PLUG, CONNECTOR 12P			
		< DIODE >			
D901	8-719-945-59	DIODE DSA3A4			
D931	8-719-034-46	DIODE MA4062-M (QZ)			
		< IC >			
IC901	8-759-160-00	IC HA13151 (XR-U500RDS)			
IC901	8-759-159-99	IC HA13150A (XR-U700RDS)			
		< JACK >			
J905	1-691-684-31	JACK, PIN 6P (UNLINK IN AUDIO, LINE OUT REAR, LINE OUT FRONT) (XR-U500RDS)			
J905	1-691-684-11	JACK, PIN 6P (UNLINK IN AUDIO, LINE OUT REAR, LINE OUT FRONT) (XR-U700RDS)			
		< RESISTOR >			
R911-914					
	1-208-373-61	METAL GLAZE	2.2	5%	1/8W
R915	1-208-498-41	METAL GLAZE	3.3K	2%	1/8W
R916	1-208-504-41	METAL GLAZE	5.6K	2%	1/8W
R921-924					
	1-208-373-61	METAL GLAZE	2.2	5%	1/8W
R925	1-208-498-41	METAL GLAZE	3.3K	2%	1/8W
R926	1-208-504-41	METAL GLAZE	5.6K	2%	1/8W
R931	1-216-049-00	METAL CHIP	1K	5%	1/10W
R941	1-208-510-41	METAL GLAZE	10K	2%	1/8W
R942	1-208-494-41	METAL GLAZE	2.2K	2%	1/8W
**********					
*	A-3295-493-A	EQUALIZER BOARD, COMPLETE (XR-U500RDS)			
*	A-3295-492-A	EQUALIZER BOARD, COMPLETE (XR-U700RDS)			
		**********			
		< CAPACITOR >			
C301	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C302	1-104-534-91	FILM CHIP	390PF	5%	50V
C303	1-104-534-91	FILM CHIP	390PF	5%	50V
C304	1-104-551-11	FILM CHIP	0.01uF	5%	16V
C305	1-107-535-91	ELECT CHIP	0.22uF	20%	50V
C306	1-104-543-11	FILM CHIP	0.0022uF	5%	50V
		(XR-U700RDS)			
C307	1-104-543-11	FILM CHIP	0.0022uF	5%	50V
		(XR-U700RDS)			
C308	1-104-543-11	FILM CHIP	0.0022uF	5%	50V
		(XR-U700RDS)			
C309	1-104-563-11	FILM CHIP	0.1uF	5%	16V
C310	1-104-563-11	FILM CHIP	0.1uF	5%	16V
		(XR-U700RDS)			
C311	1-164-174-11	CERAMIC CHIP	0.0082uF	10%	25V

EQUALIZER KEY

Ref. No.	Part No.	Description			Remark
C312	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C313	1-126-187-11	ELECT	0.1uF	20%	50V
C314	1-107-551-91	ELECT CHIP	100uF	20%	10V
C315	1-126-193-11	ELECT	1uF	20%	50V
C316	1-165-128-11	CERAMIC CHIP	0.22uF		16V
C401	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C402	1-104-534-91	FILM CHIP	390PF	5%	50V
C403	1-104-534-91	FILM CHIP	390PF	5%	50V
C404	1-104-551-11	FILM CHIP	0.01uF	5%	16V
C405	1-107-535-91	ELECT CHIP	0.22uF	20%	50V
C406	1-104-543-11	FILM CHIP (XR-U700RDS)	0.0022uF	5%	50V
C407	1-104-543-11	FILM CHIP (XR-U700RDS)	0.0022uF	5%	50V
C408	1-104-543-11	FILM CHIP (XR-U700RDS)	0.1uF	5%	16V
C409	1-104-563-11	FILM CHIP	0.1uF	5%	16V
C410	1-104-563-11	FILM CHIP (XR-U700RDS)	0.1uF	5%	16V
C415	1-164-361-11	CERAMIC CHIP	0.047uF		16V
		< CONNECTOR >			
CN301	1-569-806-21	CONNECTOR, FPC 5P			
CN302	1-565-770-11	CONNECTOR, FPC (1.0MM) (ZIF) 6P			
* CN303	1-691-741-21	PIN, CONNECTOR (PC BOARD) 2P			
* CN401	1-750-217-21	CONNECTOR (WAFER) 18P			
		< DIODE >			
D301	8-719-404-35	DIODE MA141WK			
D302	8-719-404-35	DIODE MA141WK			
D303	8-719-404-35	DIODE MA141WK			
		< IC >			
IC401	8-759-161-01	IC HA12164 (XR-U500RDS)			
IC401	8-759-160-99	IC HA12174 (XR-U700RDS)			
		< RESISTOR >			
R301	1-208-534-61	METAL GLAZE	100K	5%	1/10W
R302	1-208-534-61	METAL GLAZE	100K	5%	1/10W
R303	1-208-464-61	METAL GLAZE	12K	5%	1/10W
R304	1-208-468-61	METAL GLAZE	18K	5%	1/10W
R305	1-208-546-61	METAL GLAZE	330K	5%	1/10W
R306	1-218-724-11	METAL CHIP (XR-U700RDS)	22K	0.50%	1/16W
R307	1-218-313-11	METAL CHIP (XR-U700RDS)	22K	0.50%	1/16W
R308	1-216-839-11	METAL CHIP (XR-U700RDS)	33K	5%	1/16W
R309	1-216-836-11	METAL CHIP	18K	5%	1/16W
R310	1-216-845-11	METAL CHIP (XR-U700RDS)	100K	5%	1/16W
R311	1-216-851-11	METAL CHIP	330K	5%	1/16W
R312	1-216-853-11	METAL CHIP	470K	5%	1/16W
R313	1-216-841-11	METAL CHIP	47K	5%	1/16W
R314	1-216-836-11	METAL CHIP	18K	5%	1/16W
R315	1-216-833-11	METAL CHIP	10K	5%	1/16W
R401	1-208-534-61	METAL GLAZE	100K	5%	1/10W
R402	1-208-534-61	METAL GLAZE	100K	5%	1/10W
R403	1-208-464-61	METAL GLAZE	12K	5%	1/10W
R404	1-208-468-61	METAL GLAZE	18K	5%	1/10W
R405	1-208-546-61	METAL GLAZE	330K	5%	1/10W
R406	1-218-724-11	METAL CHIP (XR-U700RDS)	22K	0.50%	1/16W
R407	1-218-313-11	METAL CHIP (XR-U700RDS)	560	0.50%	1/16W
		< VARIABLE RESISTOR >			
RV301	1-241-552-11	RES, ADJ CERMET 470			
RV401	1-241-552-11	RES, ADJ CERMET 470			
		< SWITCH >			
S301	1-570-953-11	SWITCH, PUSH (1 KEY) (DETECT)			
S302	1-570-953-11	SWITCH, PUSH (1 KEY) (FWD/REV)			
**********					
*	A-3222-612-A	KEY BOARD, COMPLETE			
		**********			
*	3-389-672-01	HOLDER (MAIN:LCD)			
*	3-389-673-01	PLATE (MAIN:LCD), LIGHT GUIDE			
*	3-389-753-01	REFLECTOR (MAIN), SHEET			
*	3-904-246-01	HOLDER (SUB:LCD)			
*	3-904-247-01	PLATE (SUB:LCD), LIGHT GUIDE			
*	3-904-248-01	REFLECTOR (SUB), SHEET			
*	3-905-675-01	REFLECTOR (MIRROR)			
		< CAPACITOR >			
C701	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C702	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C703	1-164-232-11	CERAMIC CHIP	0.01uF		50V
		< CONNECTOR >			
* CNP701	1-691-557-21	PIN, CONNECTOR 12P			
		< DIODE >			
D701	8-719-987-45	LED CL-155Y/PG-CD (TAPE ◁▯▷)			
D702	8-719-987-45	LED CL-155Y/PG-CD (⏏)			
D703	8-719-987-45	LED CL-155Y/PG-CD (CD)			
D704	8-719-987-45	LED CL-155Y/PG-CD (AF/TA)			

Ref. No.	Part No.	Description	Remark
D705	8-719-987-45	LED CL-155Y/PG-CD (TUNER)	
D706	8-719-987-45	LED CL-155Y/PG-CD (DSP)	
D707	8-719-987-45	LED CL-155Y/PG-CD (FILE)	
D708	8-719-987-45	LED CL-155Y/PG-CD (SENS)	
D709	8-719-987-45	LED CL-155Y/PG-CD (10)	
D710	8-719-987-45	LED CL-155Y/PG-CD (9)	
D711	8-719-987-45	LED CL-155Y/PG-CD (MTL/8)	
D713	8-719-987-45	LED CL-155Y/PG-CD (ATA/5)	
D714	8-719-987-45	LED CL-155Y/PG-CD (BANK/4)	
D715	8-719-987-45	LED CL-155Y/PG-CD (SHUF/3)	
D716	8-719-987-45	LED CL-155Y/PG-CD (REPEAT/2)	
D717	8-719-987-45	LED CL-155Y/PG-CD (MUTE)	
D718	8-719-987-45	LED CL-155Y/PG-CD (+)	
D719	8-719-987-45	LED CL-155Y/PG-CD (SEL)	
D720	8-719-987-45	LED CL-155Y/PG-CD (□□/7)	
D722	8-719-987-45	LED CL-155Y/PG-CD (-)	
D723	8-719-987-45	LED CL-155Y/PG-CD (BL. SKIP/6)	
D724	8-719-987-45	LED CL-155Y/PG-CD (INTRO/1)	
D725	8-719-404-49	DIODE MA111	
D726	8-719-422-43	DIODE MA8051-H	
D727	8-719-422-43	DIODE MA8051-H	
D728	8-719-404-49	DIODE MA111	
D729	8-719-404-49	DIODE MA111	
		< IC >	
IC701	8-759-171-74	IC MSM6660-01GS-V1K	
IC702	8-759-194-76	IC RS-30	
		< LIQUID CRYSTAL DISPLAY >	
LCD701	1-810-094-11	DISPLAY PANEL, LIQUID CRYSTAL (MAIN)	
LCD702	1-810-095-11	DISPLAY PANEL, LIQUID CRYSTAL (SUB)	
		< PILOT LAMP >	
PL701	1-517-181-11	LAMP, PILOT	
PL702	1-517-181-11	LAMP, PILOT	
PL703	1-517-181-21	LAMP, PILOT	
PL704	1-517-181-21	LAMP, PILOT	
PL705	1-517-181-11	LAMP, PILOT	
PL706	1-517-181-21	LAMP, PILOT	
		< TRANSISTOR >	
Q701-704			
	8-729-904-66	TRANSISTOR DTD113EK	
		< RESISTOR >	
R701	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R703	1-216-039-00	METAL CHIP 390 5% 1/10W	
R704	1-216-033-00	METAL CHIP 220 5% 1/10W	
R705	1-216-033-00	METAL CHIP 220 5% 1/10W	
R706	1-216-035-00	METAL CHIP 270 5% 1/10W	
R707	1-216-033-00	METAL CHIP 220 5% 1/10W	
R708	1-216-023-00	METAL CHIP 82 5% 1/10W	
R709	1-216-023-00	METAL CHIP 82 5% 1/10W	
R710	1-216-033-00	METAL CHIP 220 5% 1/10W	
R714	1-216-041-00	METAL CHIP 470 5% 1/10W	
R715	1-216-041-00	METAL CHIP 470 5% 1/10W	
R716-718			
	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R719	1-216-097-00	METAL CHIP 100K 5% 1/10W	
R720	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R721-723			
	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R724	1-216-025-00	METAL CHIP 100 5% 1/10W	
R730	1-216-039-00	METAL CHIP 390 5% 1/10W	
R731	1-216-035-00	METAL CHIP 270 5% 1/10W	
R732	1-216-035-00	METAL CHIP 270 5% 1/10W	
R733	1-216-027-00	METAL CHIP 120 5% 1/10W	
R734	1-216-027-00	METAL CHIP 120 5% 1/10W	
R735	1-216-035-00	METAL CHIP 270 5% 1/10W	
R751	1-216-647-11	METAL CHIP 680 0.5% 1/10W	
R752	1-216-820-11	METAL CHIP 820 5% 1/16W	
R753	1-216-820-11	METAL CHIP 820 5% 1/16W	
R754	1-216-651-11	METAL CHIP 1K 0.5% 1/10W	
R755	1-216-651-11	METAL CHIP 1K 0.5% 1/10W	
R756	1-216-655-11	METAL CHIP 1.5K 0.5% 1/10W	
R757	1-216-655-11	METAL CHIP 1.5K 0.5% 1/10W	
R758	1-216-660-11	METAL CHIP 2.4K 0.5% 1/10W	
R759	1-216-661-11	METAL CHIP 2.7K 0.5% 1/10W	
R760	1-216-665-11	METAL CHIP 3.9K 0.5% 1/10W	
R761	1-216-669-11	METAL CHIP 5.6K 0.5% 1/10W	
R762	1-216-673-11	METAL CHIP 8.2K 0.5% 1/10W	
R763	1-216-679-11	METAL CHIP 15K 0.5% 1/10W	
R771	1-216-647-11	METAL CHIP 680 0.5% 1/10W	
R772	1-216-820-11	METAL CHIP 820 5% 1/16W	
R773	1-216-820-11	METAL CHIP 820 5% 1/16W	
R774	1-216-821-11	METAL CHIP 1K 5% 1/16W	
R775	1-216-821-11	METAL CHIP 1K 5% 1/16W	
R776	1-216-823-11	METAL CHIP 1.5K 5% 1/16W	
R777	1-216-823-11	METAL CHIP 1.5K 5% 1/16W	
R778	1-216-660-11	METAL CHIP 2.4K 0.5% 1/10W	
R779	1-216-661-11	METAL CHIP 2.7K 0.5% 1/10W	
R780	1-216-665-11	METAL CHIP 3.9K 0.5% 1/10W	
R781	1-216-669-11	METAL CHIP 5.6K 0.5% 1/10W	
		< SWITCH >	
S701	1-692-037-31	SWITCH, KEY BOARD (⏏)	
S702	1-692-037-31	SWITCH, KEY BOARD (TAPE◁□▷)	

KEY MAIN

Ref. No.	Part No.	Description			Remark
S703	1-692-037-31	SWITCH, KEY BOARD (DSP)			
S704	1-692-037-31	SWITCH, KEY BOARD (DSPL)			
S705	1-692-037-31	SWITCH, KEY BOARD (10)			
S706	1-692-037-31	SWITCH, KEY BOARD (ATA/5)			
S707	1-692-037-31	SWITCH, KEY BOARD (9)			
S708	1-692-037-31	SWITCH, KEY BOARD (BANK/4)			
S709	1-692-037-31	SWITCH, KEY BOARD (SHUF/3)			
S710	1-692-037-31	SWITCH, KEY BOARD (MTL/8)			
S711	1-692-037-31	SWITCH, KEY BOARD (REPEAT/2)			
S712	1-692-037-31	SWITCH, KEY BOARD (□□ /7)			
S713	1-692-037-31	SWITCH, KEY BOARD (INTRO/1)			
S714	1-692-037-31	SWITCH, KEY BOARD (BL. SKIP/6)			
S715	1-692-037-31	SWITCH, KEY BOARD (OFF)			
S716	1-692-037-31	SWITCH, KEY BOARD (TUNER)			
S717	1-692-037-31	SWITCH, KEY BOARD (AF/TA)			
S718	1-692-037-31	SWITCH, KEY BOARD (CD)			
S719	1-692-037-31	SWITCH, KEY BOARD (SENS)			
S720	1-692-037-31	SWITCH, KEY BOARD (FILE)			
S721	1-692-037-31	SWITCH, KEY BOARD (AMS/SEEK + ⏭)			
S722	1-692-037-31	SWITCH, KEY BOARD (AMS/SEEK - ⏮)			
S723	1-692-037-31	SWITCH, KEY BOARD (+)			
S724	1-692-037-31	SWITCH, KEY BOARD (SEL)			
S725	1-692-037-31	SWITCH, KEY BOARD (-)			
S726	1-692-037-31	SWITCH, KEY BOARD (MUTE)			
**********					
*	A-3295-638-A	MAIN BOARD, COMPLETE (XR-U700RDS:AEP)			
*	A-3295-646-A	MAIN BOARD, COMPLETE (XR-U500RDS:AEP)			
*	A-3295-658-A	MAIN BOARD, COMPLETE (XR-U700RDS:GERMAN)			
*	A-3295-659-A	MAIN BOARD, COMPLETE (XR-U500RDS:GERMAN)			
		**********			
		< BUZZER >			
BZ601	1-529-108-21	BUZZER, PIEZOELECTRIC			
		< CAPACITOR >			
C17	1-124-994-11	ELECT	100uF	20%	10V
C18	1-124-584-00	ELECT (XR-U500RDS)	100uF	20%	10V
C18	1-104-955-61	ELECT (XR-U700RDS)	100uF	20%	10V
C19	1-124-994-11	ELECT	100uF	20%	10V
C20	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C21	1-124-584-00	ELECT (XR-U500RDS)	100uF	20%	10V
C21	1-104-955-61	ELECT (XR-U700RDS)	100uF	20%	10V
C22	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C23-25					
	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C26	1-136-171-00	FILM	0.033uF	5%	50V
C27	1-130-475-00	MYLAR	0.0022uF	5%	50V
C28	1-126-154-11	ELECT	47uF	20%	6.3V
C29	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C30	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C31	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C32-35					
	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C36	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C37	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C38	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C40	1-126-154-11	ELECT	47uF	20%	6.3V
C41	1-104-675-21	MYLAR	0.001uF	5%	50V
C42	1-130-479-00	MYLAR	0.0047uF	5%	50V
C43	1-136-165-00	FILM	0.1uF	5%	50V
C44	1-136-169-00	FILM	0.22uF	5%	50V
C51	1-163-018-00	CERAMIC CHIP	0.0056uF	5%	50V
C60	1-124-229-00	ELECT (GERMAN)	33uF	20%	10V
C61	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C79	1-136-156-00	FILM (AEP)	0.018uF	5%	50V
C79	1-163-157-00	FILM (GERMAN)	0.022uF	5%	50V
C80	1-136-156-00	FILM (AEP)	0.018uF	5%	50V
C80	1-163-157-00	EILM (GERMAN)	0.022uF	5%	50V
C81	1-126-301-11	ELECT (XR-U500RDS)	1uF	20%	50V
C81	1-104-943-61	ELECT (XR-U700RDS)	2.2uF	20%	50V
C82	1-126-301-11	ELECT (XR-U500RDS)	1uF	20%	50V
C82	1-104-943-61	ELECT (XR-U700RDS)	2.2uF	20%	50V
C85	1-137-189-11	FILM	0.18uF	5%	50V
C87	1-136-164-00	FILM	0.082uF	5%	50V
C100	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C101	1-126-301-11	ELECT (XR-U500RDS)	1uF	20%	50V
C101	1-104-942-61	ELECT (XR-U700RDS)	1uF	20%	50V
C102	1-126-301-11	ELECT (XR-U500RDS)	1uF	20%	50V
C102	1-104-942-61	ELECT (XR-U700RDS)	1uF	20%	50V
C104	1-126-301-11	ELECT (XR-U500RDS)	1uF	20%	50V
C104	1-104-942-61	ELECT (XR-U700RDS)	1uF	20%	50V
C106	1-124-257-00	ELECT (XR-U500RDS)	2.2uF	20%	50V

Ref. No.	Part No.	Description			Remark
C106	1-104-943-61	ELECT (XR-U700RDS)	2.2uF	20%	50V
C107	1-124-257-00	ELECT (XR-U500RDS)	2.2uF	20%	50V
C107	1-104-943-61	ELECT (XR-U700RDS)	2.2uF	20%	50V
C108-110					
	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C111	1-136-164-00	FILM	0.082uF	5%	50V
C112	1-130-475-00	MYLAR	0.0022uF	5%	50V
C113	1-126-574-61	ELECT (XR-U500RDS)	10uF	20%	35V
C113	1-104-948-61	ELECT (XR-U700RDS)	10uF	20%	35V
C114	1-130-478-00	MYLAR	0.0039uF	5%	50V
C115	1-126-574-61	ELECT (XR-U500RDS)	10uF	20%	35V
C115	1-104-948-61	ELECT (XR-U700RDS)	10uF	20%	35V
C116	1-136-169-00	FILM	0.22uF	5%	50V
C117	1-126-163-11	ELECT (XR-U500RDS)	4.7uF	20%	50V
C117	1-104-947-61	ELECT (XR-U700RDS)	4.7uF	20%	35V
C119	1-126-163-11	ELECT (XR-U500RDS)	4.7uF	20%	50V
C119	1-104-947-61	ELECT (XR-U700RDS)	4.7uF	20%	35V
C120	1-126-163-11	ELECT (XR-U500RDS)	4.7uF	20%	50V
C120	1-104-947-61	ELECT (XR-U700RDS)	4.7uF	20%	35V
C122	1-128-241-11	ELECT	220uF	20%	10V
C125	1-126-301-11	ELECT (XR-U500RDS)	1uF	20%	50V
C125	1-104-942-61	ELECT (XR-U700RDS)	1uF	20%	50V
C126	1-126-301-11	ELECT (XR-U500RDS)	1uF	20%	50V
C126	1-104-942-61	ELECT (XR-U700RDS)	1uF	20%	50V
C127	1-104-551-11	FILM CHIP	0.01uF	5%	16V
C200	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C201	1-126-301-11	ELECT (XR-U500RDS)	1uF	20%	50V
C201	1-104-942-61	ELECT (XR-U700RDS)	1uF	20%	50V
C202	1-126-301-11	ELECT (XR-U500RDS)	1uF	20%	50V
C202	1-104-942-61	ELECT (XR-U700RDS)	1uF	20%	50V
C204	1-126-301-11	ELECT (XR-U500RDS)	1uF	20%	50V
C204	1-104-942-61	ELECT (XR-U700RDS)	1uF	20%	50V
C206	1-124-257-00	ELECT (XR-U500RDS)	2.2uF	20%	50V
C206	1-104-943-61	ELECT (XR-U700RDS)	2.2uF	20%	50V
C207	1-124-257-00	ELECT (XR-U500RDS)	2.2uF	20%	50V
C207	1-104-943-61	ELECT (XR-U700RDS)	2.2uF	20%	50V
C208-210					
	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C211	1-136-164-00	FILM	0.082uF	5%	50V
C212	1-130-475-00	MYLAR	0.0022uF	5%	50V
C213	1-126-574-61	ELECT (XR-U500RDS)	10uF	20%	35V
C213	1-104-948-61	ELECT (XR-U700RDS)	10uF	20%	35V
C214	1-130-478-00	MYLAR	0.0039uF	5%	50V
C215	1-126-574-61	ELECT (XR-U500RDS)	10uF	20%	35V
C215	1-104-948-61	ELECT (XR-U700RDS)	10uF	20%	35V
C216	1-136-169-00	FILM	0.22uF	5%	50V
C217	1-126-163-11	ELECT (XR-U500RDS)	4.7uF	20%	50V
C217	1-104-947-61	ELECT (XR-U700RDS)	4.7uF	20%	35V
C219	1-126-163-11	ELECT (XR-U500RDS)	4.7uF	20%	50V
C219	1-104-947-61	ELECT (XR-U700RDS)	4.7uF	20%	35V
C220	1-126-163-11	ELECT (XR-U500RDS)	4.7uF	20%	50V
C220	1-104-947-61	ELECT (XR-U700RDS)	4.7uF	20%	35V
C222	1-128-241-11	ELECT	220uF	20%	10V
C225	1-126-301-11	ELECT (XR-U500RDS)	1uF	20%	50V
C225	1-104-942-61	ELECT (XR-U700RDS)	1uF	20%	50V
C226	1-126-301-11	ELECT (XR-U500RDS)	1uF	20%	50V
C226	1-104-942-61	ELECT (XR-U700RDS)	1uF	20%	50V
C227	1-104-551-11	FILM CHIP	0.01uF	5%	16V
C301	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C302	1-126-098-11	ELECT (XR-U500RDS)	22uF	20%	35V
C302	1-104-949-61	ELECT (XR-U700RDS)	22uF	20%	35V
C303	1-124-584-00	ELECT (XR-U500RDS)	100uF	20%	10V

MAIN

Ref. No.	Part No.	Description			Remark
C303	1-104-955-61	ELECT (XR-U700RDS)	100uF	20%	10V
C304	1-126-301-11	ELECT (XR-U500RDS)	1uF	20%	50V
C304	1-104-942-61	ELECT (XR-U700RDS)	1uF	20%	50V
C305	1-124-589-11	ELECT	47uF	20%	16V
C306	1-126-157-11	ELECT	10uF	20%	16V
C307	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C308	1-104-559-11	FILM CHIP	0.047uF	5%	16V
C401	1-124-242-00	ELECT	33uF	20%	25V
C402	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C403	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C404	1-126-103-11	ELECT	470uF	20%	16V
C501	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C502	1-126-153-11	ELECT	22uF	20%	6.3V
C503	1-126-153-11	ELECT	22uF	20%	6.3V
C504	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C505	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C506	1-126-157-11	ELECT	10uF	20%	16V
C507	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C510	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C511	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C512	1-126-301-11	ELECT (XR-U500RDS)	1uF	20%	50V
C512	1-104-942-61	ELECT (XR-U700RDS)	1uF	20%	50V
C513	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C514	1-126-163-11	ELECT	4.7uF	20%	50V
C515	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C516	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C519	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C550	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C560	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C561	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C562	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C563	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C564	1-163-127-00	CERAMIC CHIP	270PF	5%	50V
C569	1-126-157-11	ELECT	10uF	20%	16V
C574	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C577	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C578	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C580	1-125-705-11	CAP, DOUBLE LAYERS 0.22F			
C581	1-162-995-11	CERAMIC CHIP	0.022uF		50V
C582	1-124-584-00	ELECT	100uF	20%	10V
C600	1-135-138-11	TANTAL. CHIP	10uF	20%	25V
C601	1-124-234-00	ELECT	22uF	20%	16V
C602	1-135-138-11	TANTAL. CHIP	10uF	20%	25V
C603	1-124-589-11	ELECT	47uF	20%	16V
C604	1-124-589-11	ELECT	47uF	20%	16V

Ref. No.	Part No.	Description			Remark
C605	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C607	1-124-584-00	ELECT (XR-U500RDS)	100uF	20%	10V
C607	1-104-955-61	ELECT (XR-U700RDS)	100uF	20%	10V
C608	1-124-584-00	ELECT (XR-U500RDS)	100uF	20%	10V
C608	1-104-955-61	ELECT (XR-U700RDS)	100uF	20%	10V
C610	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C611	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C651	1-126-163-11	ELECT	4.7uF	20%	50V

< CONNECTOR >

* CN301	1-695-202-11	SOCKET, CONNECTOR 15P	
CN302	1-580-916-11	SOCKET, CONNECTOR 12P	
* CN401	1-750-218-21	CONNECTOR (HOUSING) 18P	
CN402	1-691-591-11	PIN, CONNECTOR (1.5MM) (SMD) 8P	
CN551	1-580-907-11	PLUG, CONNECTOR (UNLINK IN CONTROL)	
CN571	1-750-621-11	PLUG, CONNECTOR (14P-L)	

< DIODE >

D3	8-719-034-63	DIODE	MA4091-H (QZ)
D4	8-719-034-42	DIODE	MA4056-M (QZ)
D6	8-719-041-79	DIODE	MA721WA-TX
D7	8-719-041-79	DIODE	MA721WA-TX
D101	8-719-034-22	DIODE	MA4039-M (QZ)
D250	8-719-404-49	DIODE	MA111
D302	8-719-404-49	DIODE	MA111
D303	8-719-027-48	DIODE	MA142WA
D304	8-719-404-49	DIODE	MA111
D401	8-719-400-18	DIODE	MA152WK
D402	8-719-034-63	DIODE	MA4091-H (QZ)
D403	8-719-404-49	DIODE	MA111
D404	8-719-404-49	DIODE	MA111
D405	8-719-404-49	DIODE	MA111
D501	8-719-027-48	DIODE	MA142WA
D502	8-719-404-49	DIODE	MA111
D551	8-719-034-49	DIODE	MA4068-L (QZ)
D552	8-719-034-46	DIODE	MA4062-M (QZ)
D553	8-719-034-46	DIODE	MA4062-M (QZ)
D554	8-719-404-49	DIODE	MA111
D555	8-719-404-49	DIODE	MA111
D556	8-719-034-46	DIODE	MA4062-M (QZ)
D571	8-719-034-46	DIODE	MA4062-M (QZ)
D572	8-719-034-46	DIODE	MA4062-M (QZ)
D573	8-719-034-46	DIODE	MA4062-M (QZ)
D574	8-719-034-46	DIODE	MA4062-M (QZ)
D575	8-719-034-46	DIODE	MA4062-M (QZ)

Ref. No.	Part No.	Description	Remark
D576	8-719-034-46	DIODE MA4062-M (QZ)	
D577	8-719-034-46	DIODE MA4062-M (QZ)	
D578	8-719-034-46	DIODE MA4062-M (QZ)	
D580	8-719-034-70	DIODE MA4110-M (QZ)	
D582	8-719-027-48	DIODE MA142WA	
D583	8-719-820-05	DIODE 1SS181	
D584	8-719-404-49	DIODE MA111	
D601	8-719-034-42	DIODE MA4056-M (QZ)	
D602	8-719-034-98	DIODE MA4200-M (QZ)	
D651	8-719-027-50	DIODE MA142WK	
D652	8-719-034-90	DIODE MA4160-M (QZ)	
D653	8-719-034-54	DIODE MA4075-M (QZ)	
		< FERRITE BEAD >	
FB503	1-414-135-11	INDUCTOR, FERRITE BEAD 600	
FB601-603			
	1-414-135-11	INDUCTOR, FERRITE BEAD 600	
		< IC >	
IC2	8-759-823-81	IC LC7216M	
IC3	8-759-998-98	IC LM358D	
IC4	8-759-242-66	IC TC4W66F	
IC10	8-759-096-19	IC RC4558DR-A (XR-U500RDS)	
IC10	8-759-701-40	IC NJM3404AM-T1 (XR-U700RDS)	
IC11	8-759-096-19	IC RC4558DR-A (XR-U500RDS)	
IC11	8-759-701-40	IC NJM3404AM-T1 (XR-U700RDS)	
IC101	8-752-063-44	IC CXA1646Q	
IC106	8-759-700-94	IC NJM5532M	
IC109	8-759-096-19	IC RC4558DR-A (XR-U500RDS)	
IC109	8-759-701-40	IC NJM3404AM-T1 (XR-U700RDS)	
IC110	8-759-096-19	IC RC4558DR-A (XR-U500RDS)	
IC110	8-759-701-40	IC NJM3404AM-T1 (XR-U700RDS)	
IC401	8-759-823-87	IC LB1638M	
IC501	8-759-189-20	IC uPD75518GF-131-3B9	
IC502	8-759-191-96	IC MN1882417SNU1	
IC504	8-759-168-53	IC LH5116N3	
IC505	8-759-035-87	IC SC7S00F	
IC506	8-759-163-63	IC TDA7330BD-013TR	
IC551	8-759-096-16	IC MM1175XFF	
IC571	8-759-167-83	IC PST600EMT-T1	
IC601	8-759-182-75	IC BA3910B-V2	
		< JACK >	
* J1	1-750-619-11	JACK (ANTENNA)	
		< JUMPER RESISTOR >	
JR504	1-216-295-00	METAL CHIP 0 5% 1/10W	

Ref. No.	Part No.	Description	Remark
		< COIL >	
L3	1-410-204-31	INDUCTOR CHIP 10uH	
L501	1-410-204-31	INDUCTOR CHIP 10uH	
L502	1-410-509-61	INDUCTOR 10uH	
L504	1-410-509-61	INDUCTOR 10uH	
L505	1-410-204-31	INDUCTOR CHIP 10uH	
		< TRANSISTOR >	
Q5	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q6	8-729-021-94	TRANSISTOR 2SK1657-T1B	
Q8-10			
	8-729-021-95	TRANSISTOR RN1441-A-TE85L	
Q11	8-729-015-74	TRANSISTOR UN5111	
Q12	8-729-421-22	TRANSISTOR UN2211	
Q61	8-729-421-22	TRANSISTOR UN2211 (GERMAN)	
Q101	8-729-021-95	TRANSISTOR RN1441-A-TE85L	
Q102	8-729-021-95	TRANSISTOR RN1441-A-TE85L	
Q201	8-729-021-95	TRANSISTOR RN1441-A-TE85L	
Q202	8-729-021-95	TRANSISTOR RN1441-A-TE85L	
Q301	8-729-424-08	TRANSISTOR UN2111	
Q302	8-729-021-93	TRANSISTOR UPA502T-T1	
Q401	8-729-807-12	TRANSISTOR 2SD1802-S	
Q402	8-729-020-67	TRANSISTOR XN1A312-TX	
Q403	8-729-106-60	TRANSISTOR 2SB1115A	
Q404	8-729-421-22	TRANSISTOR UN2211	
Q405	8-729-421-22	TRANSISTOR UN2211	
Q502	8-729-020-67	TRANSISTOR XN1A312-TX	
Q551	8-729-403-35	TRANSISTOR UN5113	
Q552	8-729-231-74	TRANSISTOR 2SC4116-GL	
Q553	8-729-015-74	TRANSISTOR UN5111	
Q571	8-729-020-67	TRANSISTOR XN1A312-TX	
Q572-575			
	8-729-807-12	TRANSISTOR 2SD1802-S	
Q576	8-729-015-76	TRANSISTOR UN5211	
Q577	8-729-106-60	TRANSISTOR 2SB1115A	
Q578	8-729-920-56	TRANSISTOR FMG1	
Q579	8-729-020-67	TRANSISTOR XN1A312-TX	
Q601	8-729-807-12	TRANSISTOR 2SD1802-S	
Q602	8-729-421-22	TRANSISTOR UN2211	
Q650	8-729-421-22	TRANSISTOR UN2211	
Q651	8-729-231-74	TRANSISTOR 2SC4116-GL	
		< RESISTOR >	
R19	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R20	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R21	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R22	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R23	1-216-075-00	METAL CHIP 12K 5% 1/10W	

MAIN

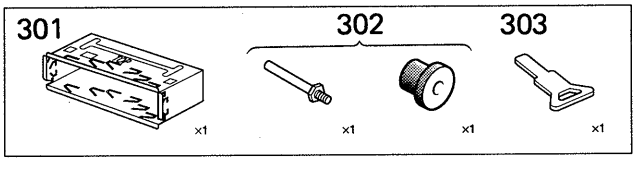
Ref. No.	Part No.	Description			Remark
R24	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R25	1-216-833-11	METAL CHIP	10K	5%	1/16W
R27	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R30	1-216-113-00	METAL CHIP	470K	5%	1/10W
R31	1-216-073-00	METAL CHIP	10K	5%	1/10W
R32	1-216-073-00	METAL CHIP	10K	5%	1/10W
R33	1-216-049-00	METAL CHIP	1K	5%	1/10W
R34	1-216-119-00	METAL CHIP	820K	5%	1/10W
R35	1-216-815-11	METAL CHIP	330	5%	1/16W
R41	1-216-073-00	METAL CHIP	10K	5%	1/10W
R42	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R43	1-216-065-00	METAL CHIP	4.7K	5%	1/10W (AEP)
R43	1-216-073-00	METAL CHIP	10K	5%	1/10W(GERMAN)
R44	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R60	1-216-045-00	METAL CHIP	680	5%	1/10W
R61	1-216-049-00	METAL CHIP	1K	5%	1/10W
R81	1-208-506-41	METAL GLAZE	6.8K	2%	1/8W (AEP)
R81	1-208-496-41	METAL GLAZE	2.7K	2%	1/8W (GERMAN)
R82	1-208-506-41	METAL GLAZE	6.8K	2%	1/8W (AEP)
R82	1-208-496-41	METAL GLAZE	2.7K	2%	1/8W (GERMAN)
R83	1-208-445-41	METAL GLAZE	2.2K	2%	1/10W
R85	1-208-449-41	METAL GLAZE	3.3K	2%	1/10W
R87	1-208-453-41	METAL GLAZE	4.7K	2%	1/10W
R88	1-208-453-41	METAL GLAZE	4.7K	2%	1/10W
R109	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R110	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R111	1-216-841-11	METAL CHIP	47K	5%	1/16W
R112	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R113	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R114	1-216-073-00	METAL CHIP	10K	5%	1/10W
R115	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R116	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R117	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R118	1-216-833-11	METAL CHIP	10K	5%	1/16W
R119	1-216-834-11	METAL CHIP	12K	5%	1/16W
R121	1-208-563-41	METAL GLAZE	33K	2%	1/8W
R122	1-208-563-41	METAL GLAZE	33K	2%	1/8W
R123	1-208-470-41	METAL GLAZE	220	2%	1/8W
R124	1-208-470-41	METAL GLAZE	220	2%	1/8W
R125	1-208-504-41	METAL GLAZE	5.6K	2%	1/8W
R126	1-208-498-41	METAL GLAZE	3.3K	2%	1/8W
R127	1-208-504-41	METAL GLAZE	5.6K	2%	1/8W
R128	1-208-498-41	METAL GLAZE	3.3K	2%	1/8W
R129	1-208-494-41	METAL GLAZE	2.2K	2%	1/8W
R131	1-208-494-41	METAL GLAZE	2.2K	2%	1/8W
R209	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R210	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R211	1-216-841-11	METAL CHIP	47K	5%	1/16W
R212	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R213	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R214	1-216-073-00	METAL CHIP	10K	5%	1/10W
R215	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R216	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R217	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R218	1-216-833-11	METAL CHIP	10K	5%	1/16W
R219	1-216-834-11	METAL CHIP	12K	5%	1/16W
R221	1-208-563-41	METAL GLAZE	33K	2%	1/8W
R222	1-208-563-41	METAL GLAZE	33K	2%	1/8W
R223	1-208-470-41	METAL GLAZE	220	2%	1/8W
R224	1-208-470-41	METAL GLAZE	220	2%	1/8W
R225	1-208-504-41	METAL GLAZE	5.6K	2%	1/8W
R226	1-208-498-41	METAL GLAZE	3.3K	2%	1/8W
R227	1-208-504-41	METAL GLAZE	5.6K	2%	1/8W
R228	1-208-498-41	METAL GLAZE	3.3K	2%	1/8W
R229	1-208-494-41	METAL GLAZE	2.2K	2%	1/8W
R231	1-208-494-41	METAL GLAZE	2.2K	2%	1/8W
R301	1-216-085-00	METAL CHIP	33K	5%	1/10W
R302	1-216-017-00	METAL CHIP	47	5%	1/10W
R305	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W
R306	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W
R401	1-216-049-00	METAL CHIP	1K	5%	1/10W
R402	1-220-149-11	METAL GLAZE	2.2	10%	1/2W
R403	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R404	1-216-073-00	METAL CHIP	10K	5%	1/10W
R405	1-216-186-00	METAL GLAZE	330	5%	1/8W
R406	1-216-186-00	METAL GLAZE	330	5%	1/8W
R502	1-216-845-11	METAL CHIP	100K	5%	1/16W
R503	1-216-841-11	METAL CHIP (XR-U500RDS)	47K	5%	1/16W
R507	1-216-837-11	METAL CHIP	22K	5%	1/16W
R510	1-216-049-00	METAL CHIP	1K	5%	1/10W
R520	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R522	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R523	1-216-097-00	METAL CHIP	100K	5%	1/10W
R524	1-216-097-00	METAL CHIP	100K	5%	1/10W
R525	1-216-845-11	METAL CHIP (XR-U700RDS)	100K	5%	1/16W
R526	1-216-845-11	METAL CHIP (XR-U500RDS)	100K	5%	1/16W
R527	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R528	1-216-089-91	METAL GLAZE	47K	5%	/10W(GERMAN)
R530	1-216-089-91	METAL GLAZE	47K		1/10W (AEP)
R531-539	1-216-097-00	METAL CHIP	100K	5%	1/10W
R540	1-216-049-00	METAL CHIP	1K	5%	1/10W
R541	1-216-097-00	METAL CHIP	100K	5%	1/10W
R542	1-216-097-00	METAL CHIP	100K	5%	1/10W
R544	1-216-097-00	METAL CHIP	100K	5%	1/10W
R545	1-216-845-11	METAL CHIP	100K	5%	1/16W

Ref. No.	Part No.	Description			Remark
R547	1-216-845-11	METAL CHIP	100K	5%	1/16W
R548	1-216-837-11	METAL CHIP	22K	5%	1/16W
R549	1-216-837-11	METAL CHIP (XR-U700RDS)	22K	5%	1/16W
R550	1-216-081-00	METAL CHIP	22K	5%	1/10W
R551	1-216-025-00	METAL CHIP	100	5%	1/10W
R552	1-216-025-00	METAL CHIP	100	5%	1/10W
R553	1-216-073-00	METAL CHIP	10K	5%	1/10W
R554	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R555	1-216-841-11	METAL CHIP	47K	5%	1/16W
R556	1-216-845-11	METAL CHIP	100K	5%	1/16W
R565	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R566	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R571	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R573	1-216-025-00	METAL CHIP	100	5%	1/10W
R575	1-216-809-11	METAL CHIP	100	5%	1/16W
R576	1-216-809-11	METAL CHIP	100	5%	1/16W
R577	1-216-017-00	METAL CHIP	47	5%	1/10W
R579	1-216-200-00	METAL GLAZE	1.2K	5%	1/8W
R580-583					
	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R584	1-216-833-11	METAL CHIP	10K	5%	1/16W
R586	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W
R587	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R588	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R589	1-216-837-11	METAL CHIP	22K	5%	1/16W
R590	1-216-845-11	METAL CHIP	100K	5%	1/16W
R592	1-216-845-11	METAL CHIP	100K	5%	1/16W
R601	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R602	1-216-049-00	METAL CHIP	1K	5%	1/10W
R603	1-216-037-00	METAL CHIP	330	5%	1/10W
R650	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W
R653	1-216-841-11	METAL CHIP	47K	5%	1/16W
R654	1-216-841-11	METAL CHIP	47K	5%	1/16W
R655	1-216-838-11	METAL CHIP	27K	5%	1/16W
R656	1-216-845-11	METAL CHIP	100K	5%	1/16W
		< NETWORK RESISTOR >			
RB504	1-239-426-91	RESISTOR, NETWORK (CHIP TYPE) (2.2KX4)			
RB508	1-236-907-11	RESISTOR, NETWORK (CHIP TYPE) (100KX4)			
RB512	1-236-907-11	RESISTOR, NETWORK (CHIP TYPE) (100KX4)			
RB516	1-236-907-11	RESISTOR, NETWORK (CHIP TYPE) (100KX4)			
RB571	1-239-426-91	RESISTOR, NETWORK (CHIP TYPE) (2.2KX4)			
		< VARIABLE RESISTOR >			
RV10	1-238-605-31	RES, ADJ, CARBON 470K			
		< SWITCH >			
S501	1-572-272-11	SWITCH, SLIDE (POWER SELECT)			
S510	1-572-288-11	SWITCH, PUSH (NOSE)			
		< TUNER >			
* TU1	A-3282-003-A	TUNER UNIT (TUX-001A)			
		< VIBRATOR >			
X1	1-567-848-11	VIBRATOR, CRYSTAL (7.2MHz)			
X502	1-567-821-11	VIBRATOR, CRYSTAL (4.19MHz)			
X503	1-579-242-11	VIBRATOR, CRYSTAL (4.332MHz)			
X504	1-579-952-21	VIBRATOR, CERAMIC (8MHz)			
**********					
*	1-648-247-11	PLUNGER BOARD			
		**********			
		< PLUNGER >			
PL401	1-454-461-11	SOLENOID, PLUNGER			
**********					
*	1-648-246-11	REEL BOARD			
		**********			
		< CONNECTOR >			
CN201	1-691-742-11	PIN, CONNECTOR (PC BOARD) 4P			
		< PHOTO INTERRUPTER >			
PH201	8-719-988-14	PHOTO INTERRUPTER PR-11-B			
PH202	8-719-988-14	PHOTO INTERRUPTER PR-11-B			
		< TRANSISTOR >			
Q201	8-729-403-07	TRANSISTOR XN1213			
		< RESISTOR >			
R201	1-216-845-11	METAL CHIP	100K	5%	1/16W
R202	1-216-845-11	METAL CHIP	100K	5%	1/16W
R203	1-216-190-00	METAL GLAZE	470	5%	1/8W
**********					
*	1-648-609-11	RESET BOARD			
		**********			
		< CONNECTOR >			
CN572	1-750-622-11	SOCKET, CONNECTOR 14P			
* CN573	1-691-558-11	SOCKET, CONNECTOR 12P			
		< DIODE >			
D570	8-719-422-64	DIODE MA8062-M			

RESET

Ref. No.	Part No.	Description	Remark
		< RESISTOR >	
R570	1-216-049-00	METAL CHIP 1K 5% 1/10W	
		< SWITCH >	
S571	1-570-909-11	SWITCH, TACTIL (REFLOW TYPE) (RESET)	
**********			
		MISCELLANEOUS	
		**********	
111	1-635-519-12	ROTARY SWITCH FLEXIBLE BOARD	
* 126	1-565-121-11	HOUSING, CONNECTOR 2P	
* 127	1-565-163-11	TERMINAL, SOLDERLESS	
F901	1-533-326-11	FUSE (BLADE TYPE) (AUTO FUSE) (3A)	
F902	1-533-331-11	FUSE (BLADE TYPE) (AUTO FUSE) (15A)	
HP901	1-543-726-41	HEAD, MAGNETIC (PLAYBACK)	
M901	X-3344-136-3	MOTOR SUB ASSY, CAPSTAN	
M902	X-3362-826-1	MOTOR ASSY	
S902	1-572-397-11	SWITCH, ROTARY SLIDE (TAPE OPERATION)	
* TU1	A-3282-003-A	TUNER UNIT (TUX-001A)	
**********			

MOUNTING HARDWARE



Ref. No.	Part No.	Description	Remark
* 301	X-3366-235-3	FRAME ASSY, FITTING	
302	X-3366-405-1	SCREW ASSY (EXP), FITTING	
303	3-388-078-01	KEY	

Ref. No.	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS	
		**********	
	X-3366-865-1	CASE ASSY	
	1-467-131-21	REMOTE COMMANDER (RM-X36) (XR-U500RDS: AEP, XR-U700RDS)	
	3-908-052-01	COVER, BATTERY (RM-X36)	
	3-756-919-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, GERMAN, ITALIAN) (XR-U700RDS)	
	3-756-919-41	MANUAL, INSTRUCTION (DUTCH, SWEDISH, SPANISH, PORTUGUESE) (XR-U700RDS:AEP)	
	3-756-920-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, GERMAN, ITALIAN) (XR-U500RDS)	
	3-756-920-41	MANUAL, INSTRUCTION (DUTCH, SWEDISH, SPANISH, PORTUGUESE) (XR-U500RDS:AEP)	
	3-756-922-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH, GERMAN, ITALIAN) (XR-U700RDS)	
	3-756-922-41	MANUAL, INSTRUCTION, INSTALL (DUTCH, SWEDISH, SPANISH, PORTUGUESE) (XR-U700RDS:AEP)	
	3-756-923-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH, GERMAN, ITALIAN) (XR-U500RDS)	
	3-756-923-41	MANUAL, INSTRUCTION, INSTALL (DUTCH, SWEDISH, SPANISH, PORTUGUESE) (XR-U500RDS:AEP)	
*	3-904-840-01	CUSHION (UPPER)	
*	3-904-841-01	CUSHION (LOWER)	
*	3-905-751-01	INDIVIDUAL CARTON (XR-U700RDS:AEP)	
*	3-905-752-01	INDIVIDUAL CARTON (XR-U700RDS:GERMAN)	
*	3-905-753-01	INDIVIDUAL CARTON (XR-U500RDS:AEP)	
*	3-905-754-01	INDIVIDUAL CARTON (XR-U500RDS:GERMAN)	
**********			

HARDWARE LIST

#1	7-621-255-65	SCREW +P 2X10
#2	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT
#3	7-621-770-67	SCREW +PTT 2.6X6 (S)
#4	7-624-102-04	STOP RING 1.5, TYPE-E
#5	7-628-253-05	SCREW +PS 2X4
#6	7-621-770-XX	SCREW +PTT 2.6X8 (S)
#7	7-627-850-67	SCREW, PRECISION +P 1.4X4
#8	7-627-850-18	SCREW, PRECISION +P 1.4X2.5
#9	7-624-104-04	STOP RING 2.0, TYPE-E
#10	7-627-554-07	SCREW, PRECISION +P 2X2.2
#11	7-621-772-10	SCREW +B 2X4
#12	7-621-775-40	SCREW +PTT 2.6X8 (S)
#13	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT
#14	7-621-775-68	SCREW +PTT 2.6X12 (S)

9-957-986-11

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XR-U500RDS/U700RDS

SONY®
SERVICE MANUAL

AEP Model

SUPPLEMENT-1

File this supplement with the service manual.

Subject: 1. TUNER MICROCOMPUTER CHANGE
2. PC BOARDS CHANGE

(ECN-CS402702)

1. TUNER MICROCOMPUTER CHANGE

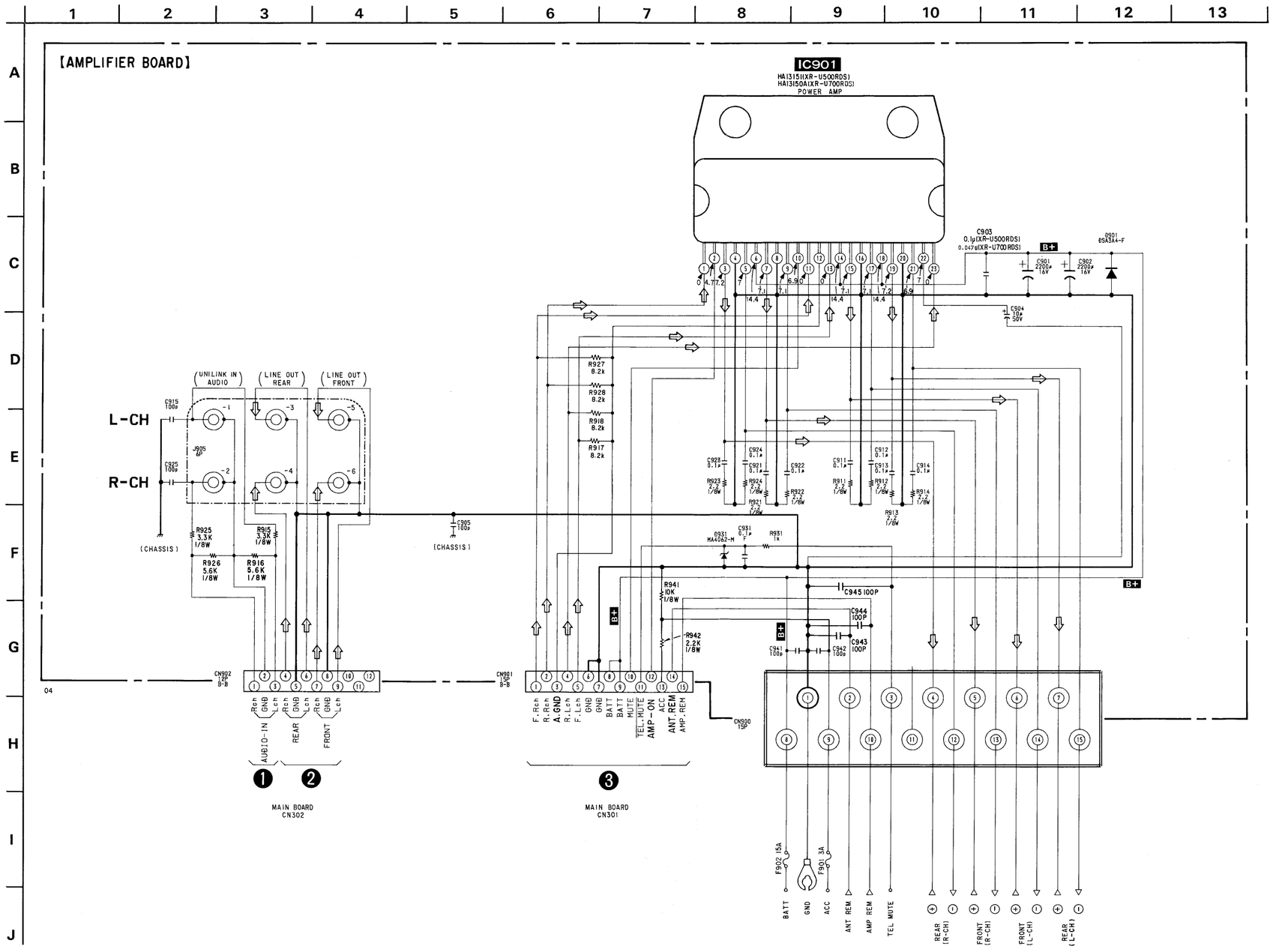
The tuner microcomputer (IC502) has four types.
When servicing/inspecting, check the type of the tuner microcomputer and word according to the following table.

- Types of the Tuner Microcomputer
  TYPE 1 : MN1882417SNU1
  TYPE 2 : MN1882417SNU2
  TYPE 3 : MN1883220SZE
  TYPE 4 : MN1883220SZF

	TYPE 1	TYPE 2	TYPE 3	TYPE 4
R515, 516, 559 RB520—525	MOUNT	NO MOUNT	NO MOUNT	NO MOUNT
C512, 513 FB503 IC504, 505 L502 R532—539	MOUNT	MOUNT	NO MOUNT	NO MOUNT
R544	100kΩ	100kΩ	0Ω	0Ω
C60 (German) Q61 (German)	MOUNT	MOUNT	MOUNT	NO MOUNT

2. PC BOARDS CHANGE

2-1. SCHEMATIC DIAGRAM—AMPLIFIER SECTION—



Note :

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- B+ : B+ Line
- Power voltage is dc 14.4V and fed with regulated dc power supply from BATT and ACC terminals.
- Voltage is dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM

2-3. SCHEMATIC DIAGRAM—MAIN SECTION—

Note :

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- % : indicates tolerance.
- B+ : B+ Line
- : adjustment for repair.
- Power voltage is dc 14.4V and fed with regulated dc power supply from BATT and ACC terminals.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
  ( ): MW
  < >: PB
  ⋈ : Impossible measurement point
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM
  ⇨ : PB
- TYPE1, 2, 3 and 4 are the types of the tuner microcomputer (ICS02).
- Abbreviation
  G : German model

2-4. ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u:μ, for example:
  uA ..: μA.. uPA..: μPA..
  uPB..: μPB.. uPC..: μPC.. uPD..: μPD..
- CAPACITORS
  uF: μF
- COILS
  uH: μH

When indicating parts by reference number, please include the board.

- TYPE 1, 2, 3 and 4 are the type of the tuner microcomputer (IC502).
- Abbreviation
  G : German model

Ref. No.	Part No.	Description			Remark
*	A-3295-642-A	AMPLIFIER BOARD, COMPLETE (U700RDS)			
*	A-3295-648-A	AMPLIFIER BOARD, COMPLETE (U500RDS)			
		**********			
*	3-904-673-01	PLATE (HEAT SINK), GROUND			
	7-621-770-67	SCREW +PTT 2.6X6 (S)			
		< CAPACITOR >			
C901	1-126-768-11	ELECT	2200uF	20%	16V
C902	1-126-768-11	ELECT	2200uF	20%	16V
C903	1-136-165-00	FILM (U500RDS)	0.1uF	5%	50V
C903	1-136-961-11	FILM (U700RDS)	0.047uF	10%	160V
C904	1-126-059-11	ELECT	10uF	20%	50V
C905	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C911-914					
	1-136-165-00	FILM	0.1uF	5%	50V
C915	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C921-924					
	1-136-165-00	FILM	0.1uF	5%	50V
C925	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C931	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C941-944					
	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C945	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
		< CONNECTOR >			
* CN900	1-695-244-21	PLUG, CINNECTOR 15P			
* CN901	1-695-201-11	PLUG, CONNECTOR 15P			
* CN902	1-580-914-11	PLUG, CONNECTOR 12P			
		< DIODE >			
D901	8-719-945-59	DIODE DSA3A4			
D931	8-719-034-46	DIODE MA4062-M(QZ)			
		< IC >			
IC901	8-759-260-77	IC HA13150A (U700RDS)			
IC901	8-759-279-87	IC HA13151 (U500RDS)			
		< JACK >			
J905	1-691-684-11	JACK, PIN 6P (UNILINK IN AUDIO, LINE OUT REAR, LINE OUT FRONT) (U700RDS)			
J905	1-691-684-31	JACK, PIN 6P (UNILINK IN AUDIO, LINE OUT REAR, LINE OUT FRONT) (U500RDS)			
		< RESISTOR >			
R911-914					
	1-208-373-11	METAL GLAZE	2.2	2%	1/8W
R915	1-216-210-00	METAL GLAZE	3.3K	2%	1/8W
R916	1-216-216-00	METAL GLAZE	5.6K	2%	1/8W
R917	1-216-673-11	METAL CHIP	8.2K	0.5%	1/10W
R918	1-216-673-11	METAL CHIP	8.2K	0.5%	1/10W
R921-924					
	1-208-373-11	METAL GLAZE	2.2	2%	1/8W
R925	1-216-210-00	METAL GLAZE	3.3K	2%	1/8W
R926	1-216-216-00	METAL GLAZE	5.6K	2%	1/8W
R927	1-216-673-11	METAL CHIP	8.2K	0.5%	1/10W
R928	1-216-673-11	METAL CHIP	8.2K	0.5%	1/10W
R931	1-216-049-00	METAL CHIP	1K	5%	1/10W
R941	1-216-222-00	METAL GLAZE	10K	2%	1/8W
R942	1-216-206-00	METAL GLAZE	2.2K	2%	1/8W
**********					
*	A-3295-492-A	EQUALIZER BOARD, COMPLETE (U700RDS)			
*	A-3295-493-A	EQUALIZER BOARD, COMPLETE (U500RDS)			
		**********			
		< CAPACITOR >			
C301	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C302	1-104-534-11	FILM CHIP	390PF	5%	50V
C303	1-104-534-11	FILM CHIP	390PF	5%	50V
C304	1-104-551-11	FILM CHIP	0.01uF	5%	16V
C305	1-126-189-11	ELECT	0.22uF	20%	50V
C306-308					
	1-104-543-11	FILM CHIP (U700RDS)	0.0022uF	5%	50V
C309	1-104-563-11	FILM CHIP	0.1uF	5%	16V

Ref. No.	Part No.	Description			Remark
C310	1-104-563-11	FILM CHIP (U700RDS)	0.1uF	5%	16V
C311	1-164-174-11	CERAMIC CHIP	0.0082uF	10%	25V
C312	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C313	1-126-187-11	ELECT	0.1uF	20%	50V
C314	1-128-393-11	ELECT	100uF	20%	10V
C315	1-126-193-11	ELECT	1uF	20%	50V
C316	1-165-128-11	CERAMIC CHIP	0.22uF		16V
C401	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C402	1-104-534-11	FILM CHIP	390PF	5%	50V
C403	1-104-534-11	FILM CHIP	390PF	5%	50V
C404	1-104-551-11	FILM CHIP	0.01uF	5%	16V
C405	1-126-189-11	ELECT	0.22uF	20%	50V
C406-408	1-104-543-11	FILM CHIP (U700RDS)	0.0022uF	5%	50V
C409	1-104-563-11	FILM CHIP	0.1uF	5%	16V
C410	1-104-563-11	FILM CHIP (U700RDS)	0.1uF	5%	16V
C415	1-164-361-11	CERAMIC CHIP	0.047uF		16V
C501	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
		< CONNECTOR >			
CN301	1-569-806-21	CONNECTOR, FPC5P			
CN302	1-565-770-11	CONNECTOR, FPC (1.0MM) (ZIF)			6P
* CN303	1-691-741-21	PIN, CONNECTOR (PC BOARD)			2P
* CN401	1-750-217-21	CONNECTOR (WAFER)			18P
		< DIODE >			
D301	8-719-404-35	DIODE MA141WK			
D302	8-719-404-35	DIODE MA141WK			
D303	8-719-404-35	DIODE MA141WK			
		< IC >			
IC401	8-759-160-99	IC HA12174 (U700RDS)			
IC401	8-759-161-01	IC HA12164 (U500RDS)			
		< RESISTOR >			
R301	1-216-699-11	METAL CHIP	100K	0.5%	1/10W
R302	1-216-699-11	METAL CHIP	100K	0.5%	1/10W
R303	1-216-677-11	METAL CHIP	12K	0.5%	1/10W
R304	1-208-812-11	METAL GLAZE	18K	2%	1/10W
R305	1-218-764-11	METAL GLAZE	330K	2%	1/10W
R306	1-218-724-11	METAL CHIP (U700RDS)	22K	0.50%	1/16W
R307	1-218-841-11	METAL CHIP (U700RDS)	560	0.50%	1/16W
R308	1-216-839-11	METAL CHIP	33K	5%	1/16W
R309	1-216-836-11	METAL CHIP	18K	5%	1/16W
R310	1-216-842-11	METAL CHIP	56K	5%	1/16W
R311	1-216-851-11	METAL CHIP	330K	5%	1/16W
R312	1-216-853-11	METAL CHIP	470K	5%	1/16W
R313	1-216-841-11	METAL CHIP	47K	5%	1/16W
R314	1-218-722-11	METAL CHIP	18K	0.50%	1/16W
R315	1-216-833-11	METAL CHIP	10K	5%	1/16W
R401	1-216-699-11	METAL CHIP	100K	0.5%	1/10W
R402	1-216-699-11	METAL CHIP	100K	0.5%	1/10W
R403	1-216-677-11	METAL CHIP	12K	0.5%	1/10W
R404	1-208-812-11	METAL GLAZE	18K	2%	1/10W
R405	1-218-764-11	METAL GLAZE	330K	2%	1/10W
R406	1-218-724-11	METAL CHIP (U700RDS)	22K	0.50%	1/16W
R407	1-218-841-11	METAL CHIP (U700RDS)	560	0.50%	1/16W
		< VARIABLE RESISTOR >			
RV301	1-241-552-11	RES, ADJ CERMET 470			
RV401	1-241-552-11	RES, ADJ CERMET 470			
		< SWITCH >			
S301	1-570-953-11	SWITCH, PUSH (1 KEY) (DETECT)			
S302	1-570-953-11	SWITCH, PUSH (1 KEY) (FWD/REV)			
**********					
*	A-3295-638-A	MAIN BOARD, COMPLETE (U700RDS:AEP)			
*	A-3295-646-A	MAIN BOARD, COMPLETE (U500RDS:AEP)			
*	A-3295-658-A	MAIN BOARD, COMPLETE (U700RDS:G)			
*	A-3295-659-A	MAIN BOARD, COMPLETE (U500RDS:G)			
		**********			
		< BUZZER >			
BZ601	1-529-108-21	BUZZER, PIEZOELECTRIC			
		< CAPACITOR >			
C17	1-124-994-11	ELECT	100uF	20%	10V
C18	1-124-584-00	ELECT (U500RDS)	100uF	20%	10V
C18	1-126-277-11	ELECT (U700RDS)	100uF	20%	10V
C19	1-124-994-11	ELECT	100uF	20%	10V
C20	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C21	1-124-584-00	ELECT (U500RDS)	100uF	20%	10V
C21	1-126-277-11	ELECT (U700RDS)	100uF	20%	10V
C22	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C23-25	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C26	1-136-159-00	FILM	0.033uF	5%	50V
C27	1-130-475-00	MYLAR	0.0022uF	5%	50V

MAIN

Ref. No.	Part No.	Description			Remark
C28	1-126-154-11	ELECT	47uF	20%	6. 3V
C29	1-163-038-91	CERAMIC CHIP	0. 1uF		25V
C30	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C31	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C32-35					
	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C36	1-164-161-11	CERAMIC CHIP	0. 0022uF	10%	100V
C37	1-163-038-91	CERAMIC CHIP	0. 1uF		25V
C38	1-164-182-11	CERAMIC CHIP	0. 0033uF	10%	50V
C40	1-126-154-11	ELECT	47uF	20%	6. 3V
C41	1-136-227-11	MYLAR	0. 001uF	5%	50V
C42	1-130-479-00	MYLAR	0. 0047uF	5%	50V
C43	1-136-165-00	FILM	0. 1uF	5%	50V
C44	1-136-169-00	FILM	0. 22uF	5%	50V
C49	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C51	1-163-018-00	CERAMIC CHIP	0. 0056uF	5%	50V
C60	1-124-229-00	ELECT (G) (TYPE 1-3)	33uF	20%	10V
C61	1-163-009-11	CERAMIC CHIP	0. 001uF	10%	50V
C79	1-136-156-00	FILM (AEP)	0. 018uF	5%	50V
C79	1-136-157-00	FILM (G)	0. 022uF	5%	50V
C80	1-136-156-00	FILM (AEP)	0. 018uF	5%	50V
C80	1-136-157-00	FILM (G)	0. 022uF	5%	50V
C81	1-126-301-11	ELECT (U500RDS)	1uF	20%	50V
C81	1-126-302-11	ELECT (U700RDS)	2. 2uF	20%	50V
C82	1-126-301-11	ELECT (U500RDS)	1uF	20%	50V
C82	1-126-302-11	ELECT (U700RDS)	2. 2uF	20%	50V
C85	1-137-189-11	FILM	0. 18uF	5%	50V
C87	1-136-164-00	FILM	0. 082uF	5%	50V
C100	1-163-275-11	CERAMIC CHIP	0. 001uF	5%	50V
C101	1-126-301-11	ELECT	1uF	20%	50V
C102	1-126-301-11	ELECT	1uF	20%	50V
C104	1-126-301-11	ELECT	1uF	20%	50V
C106	1-124-257-00	ELECT (U500RDS)	2. 2uF	20%	50V
C106	1-126-302-11	ELECT (U700RDS)	2. 2uF	20%	50V
C107	1-124-257-00	ELECT (U500RDS)	2. 2uF	20%	50V
C107	1-126-302-11	ELECT (U700RDS)	2. 2uF	20%	50V
C108-110					
	1-163-275-11	CERAMIC CHIP	0. 001uF	5%	50V

Ref. No.	Part No.	Description			Remark
C111	1-136-164-00	FILM	0. 082uF	5%	50V
C112	1-130-475-00	MYLAR	0. 0022uF	5%	50V
C113	1-126-295-11	ELECT	10uF	20%	35V
C114	1-130-478-00	MYLAR	0. 0039uF	5%	50V
C115	1-126-295-11	ELECT	10uF	20%	35V
C116	1-136-169-00	FILM	0. 22uF	5%	50V
C117	1-126-163-11	ELECT (U500RDS)	4. 7uF	20%	50V
C117	1-126-294-11	ELECT (U700RDS)	4. 7uF	20%	35V
C119	1-126-163-11	ELECT (U500RDS)	4. 7uF	20%	50V
C119	1-126-294-11	ELECT (U700RDS)	4. 7uF	20%	35V
C120	1-126-163-11	ELECT (U500RDS)	4. 7uF	20%	50V
C120	1-126-294-11	ELECT (U700RDS)	4. 7uF	20%	35V
C122	1-128-241-11	ELECT	220uF	20%	10V
C125	1-126-163-11	ELECT (U500RDS)	4. 7uF	20%	50V
C125	1-126-294-11	ELECT (U700RDS)	4. 7uF	20%	35V
C126	1-126-163-11	ELECT (U500RDS)	4. 7uF	20%	50V
C126	1-126-294-11	ELECT (U700RDS)	4. 7uF	20%	35V
C127	1-104-551-11	FILM CHIP	0. 01uF	5%	16V
C200	1-163-275-11	CERAMIC CHIP	0. 001uF	5%	50V
C201	1-126-301-11	ELECT	1uF	20%	50V
C202	1-126-301-11	ELECT	1uF	20%	50V
C204	1-126-301-11	ELECT	1uF	20%	50V
C206	1-124-257-00	ELECT (U500RDS)	2. 2uF	20%	50V
C206	1-126-302-11	ELECT (U700RDS)	2. 2uF	20%	50V
C207	1-124-257-00	ELECT (U500RDS)	2. 2uF	20%	50V
C207	1-126-302-11	ELECT (U700RDS)	2. 2uF	20%	50V
C208-210					
	1-163-275-11	CERAMIC CHIP	0. 001uF	5%	50V
C211	1-136-164-00	FILM	0. 082uF	5%	50V
C212	1-130-475-00	MYLAR	0. 0022uF	5%	50V
C213	1-126-295-11	ELECT	10uF	20%	35V
C214	1-130-478-00	MYLAR	0. 0039uF	5%	50V
C215	1-126-295-11	ELECT	10uF	20%	35V
C216	1-136-169-00	FILM	0. 22uF	5%	50V
C217	1-126-163-11	ELECT (U500RDS)	4. 7uF	20%	50V
C217	1-126-294-11	ELECT (U700RDS)	4. 7uF	20%	35V

Ref. No.	Part No.	Description			Remark
C219	1-126-163-11	ELECT (U500RDS)	4.7uF	20%	50V
C219	1-126-294-11	ELECT (U700RDS)	4.7uF	20%	35V
C220	1-126-163-11	ELECT (U500RDS)	4.7uF	20%	50V
C220	1-126-294-11	ELECT (U700RDS)	4.7uF	20%	35V
C222	1-128-241-11	ELECT	220uF	20%	10V
C225	1-126-163-11	ELECT (U500RDS)	4.7uF	20%	50V
C225	1-126-294-11	ELECT (U700RDS)	4.7uF	20%	35V
C226	1-126-163-11	ELECT (U500RDS)	4.7uF	20%	50V
C226	1-126-294-11	ELECT (U700RDS)	4.7uF	20%	35V
C227	1-104-551-11	FILM CHIP	0.01uF	5%	16V
C301	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C302	1-126-098-11	ELECT (U500RDS)	22uF	20%	35V
C302	1-126-296-11	ELECT (U700RDS)	22uF	20%	35V
C303	1-124-584-00	ELECT (U500RDS)	100uF	20%	10V
C303	1-126-277-11	ELECT (U700RDS)	100uF	20%	10V
C304	1-126-301-11	ELECT	1uF	20%	50V
C305	1-124-589-11	ELECT	47uF	20%	16V
C306	1-126-157-11	ELECT	10uF	20%	16V
C307	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C308	1-104-559-11	FILM CHIP	0.047uF	5%	16V
C401	1-124-242-00	ELECT	33uF	20%	25V
C402	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C403	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C404	1-126-103-11	ELECT	470uF	20%	16V
C500	1-126-541-11	ELECT	330uF	20%	16V
C501	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C502	1-126-153-11	ELECT	22uF	20%	6.3V
C503	1-126-153-11	ELECT	22uF	20%	6.3V
C504	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C505	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C506	1-126-157-11	ELECT	10uF	20%	16V
C507	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C510	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C511	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C512	1-404-942-61	ELECT (TYPE 1, 2)	1uF	20%	50V
C513	1-103-038-00	CERAMIC CHIP (TYPE 1, 2)	0.1uF		25V
C514	1-126-163-11	ELECT	4.7uF	20%	50V

Ref. No.	Part No.	Description			Remark
C515	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C516	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C519	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C550	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C560	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C561	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C562	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C563	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C564	1-163-127-00	CERAMIC CHIP	270PF	5%	50V
C569	1-126-157-11	ELECT	10uF	20%	16V
C574	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C577	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C578	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C580	1-125-705-11	DOUBLE LAYERS	0.22F		5.5V
C581	1-162-995-11	CERAMIC CHIP	0.022uF		50V
C582	1-124-584-00	ELECT	100uF	20%	10V
C590	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C591	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C592	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C601	1-124-234-00	ELECT	22uF	20%	16V
C603	1-124-589-11	ELECT	47uF	20%	16V
C604	1-124-589-11	ELECT	47uF	20%	16V
C605	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C607	1-124-584-00	ELECT (U500RDS)	100uF	20%	10V
C607	1-126-277-11	ELECT (U700RDS)	100uF	20%	10V
C608	1-124-584-00	ELECT (U500RDS)	100uF	20%	10V
C608	1-126-277-11	ELECT (U700RDS)	100uF	20%	10V
C609	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C610	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C611	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C620	1-126-157-11	ELECT	10uF	20%	16V
C621	1-135-138-11	TANTAL. CHIP	10uF	20%	25V
C651	1-126-163-11	ELECT	4.7uF	20%	50V

< CONNECTOR >

* CN301	1-695-202-11	SOCKET, CONNECTOR 15P	
* CN302	1-580-916-11	SOCKET, CONNECTOR 12P	
* CN401	1-750-218-21	CONNECTOR (HOUSING) 18P	
CN402	1-691-591-11	PIN, CONNECTOR (1.5MM) (SMD)	8P
CN551	1-580-907-11	PLUG, CONNECTOR (UNILINK IN CONTROL)	
CN571	1-750-621-11	PLUG, CONNECTOR (14P-L)	

MAIN

Ref. No.	Part No.	Description	Remark
		< DIODE >	
D3	8-719-034-63	DIODE MA4091-H(QZ)	
D4	8-719-034-42	DIODE MA4056-M(QZ)	
D6	8-719-041-79	DIODE MA721WA-TX	
D7	8-719-041-79	DIODE MA721WA-TX	
D101	8-719-034-22	DIODE MA4039-M(QZ)	
D250	8-719-404-49	DIODE MA111	
D302	8-719-404-49	DIODE MA111	
D303	8-719-027-48	DIODE MA142WA	
D304	8-719-404-49	DIODE MA111	
D401	8-719-801-78	DIODE 1SS184	
D402	8-719-034-63	DIODE MA4091-H(QZ)	
D403	8-719-404-49	DIODE MA111	
D404	8-719-404-49	DIODE MA111	
D405	8-719-404-49	DIODE MA111	
D501	8-719-027-48	DIODE MA142WA	
D502	8-719-404-49	DIODE MA111	
D551	8-719-034-49	DIODE MA4068-L(QZ)	
D552	8-719-034-46	DIODE MA4062-M(QZ)	
D553	8-719-034-46	DIODE MA4062-M(QZ)	
D554	8-719-404-49	DIODE MA111	
D555	8-719-404-49	DIODE MA111	
D556	8-719-034-46	DIODE MA4062-M(QZ)	
D571	8-719-034-46	DIODE MA4062-M(QZ)	
D572	8-719-034-46	DIODE MA4062-M(QZ)	
D573	8-719-034-46	DIODE MA4062-M(QZ)	
D574	8-719-034-46	DIODE MA4062-M(QZ)	
D575	8-719-034-46	DIODE MA4062-M(QZ)	
D576	8-719-034-46	DIODE MA4062-M(QZ)	
D577	8-719-034-46	DIODE MA4062-M(QZ)	
D578	8-719-034-46	DIODE MA4062-M(QZ)	
D580	8-719-034-70	DIODE MA4110-M(QZ)	
D582	8-719-027-48	DIODE MA142WA	
D583	8-719-400-20	DIODE MA152WA	
D584	8-719-404-49	DIODE MA111	
D601	8-719-034-42	DIODE MA4056-M(QZ)	
D602	8-719-034-98	DIODE MA4200-M(QZ)	
D651	8-719-027-50	DIODE MA142WK	
D652	8-719-034-90	DIODE MA4160-M(QZ)	
D653	8-719-034-54	DIODE MA4075-M(QZ)	
		< FERRITE BEAD >	
FB503	1-414-233-21	INDUCTOR, FERRITE BEAD (TYPE 1, 2)	
FB601-603	1-414-233-21	INDUCTOR, FERRITE BEAD	

Ref. No.	Part No.	Description	Remark
		< IC >	
IC2	8-759-823-81	IC LC7216M	
IC3	8-759-998-98	IC LM358D	
IC4	8-759-242-66	IC TC4W66F	
IC10	8-759-096-19	IC RC4558DR-A (U500RDS)	
IC10	8-759-711-82	IC NJM4580E (U700RDS)	
IC11	8-759-096-19	IC RC4558DR-A (U500RDS)	
IC11	8-759-711-82	IC NJM4580E (U700RDS)	
IC101	8-752-063-44	IC CXA1646Q	
IC106	8-759-982-04	IC NJM5532M	
IC109	8-759-096-19	IC RC4558DR-A (U500RDS)	
IC109	8-759-711-82	IC NJM4580E (U700RDS)	
IC110	8-759-096-19	IC RC4558DR-A (U500RDS)	
IC110	8-759-711-82	IC NJM4580E (U700RDS)	
IC401	8-759-823-87	IC LB1638M	
IC501	8-759-189-20	IC uPD75518GF-131-3B9	
IC502	8-759-191-96	IC MN1882417SNU1 (TYPE 1)	
IC502	8-759-259-09	IC MN1882417SNU2 (TYPE 2)	
IC502	8-759-283-34	IC MN1883220SZE (TYPE 3)	
IC502	8-759-330-63	IC MN1883220SZF (TYPE 4)	
IC504	8-759-168-53	IC LH5116N3 (TYPE 1, 2)	
IC505	8-759-231-33	IC SC7S00F (TYPE 1, 2)	
IC506	8-759-163-63	IC TDA7330BD-013TR	
IC551	8-759-096-16	IC MM1175XF-T1	
IC571	8-759-167-83	IC PST600EMT-T1	
IC601	8-759-182-75	IC BA3910B-V2	
		< JACK >	
* J1	1-750-619-11	JACK (ANTENNA)	
		< COIL >	
L3	1-410-204-31	INDUCTOR CHIP 10uH	
L501	1-410-204-31	INDUCTOR CHIP 10uH	
L502	1-410-509-61	INDUCTOR 10uH (TYPE 1, 2)	
L504	1-410-509-61	INDUCTOR 10uH	
L505	1-410-204-31	INDUCTOR CHIP 10uH	
		< TRANSISTOR >	
Q5	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q6	8-729-021-94	TRANSISTOR 2SK1657-T1B	
Q8	8-729-021-95	TRANSISTOR RN1441-A(TE85L)	
Q9	8-729-021-95	TRANSISTOR RN1441-A(TE85L)	
Q10	8-729-021-95	TRANSISTOR RN1441-A(TE85L)	
Q11	8-729-015-74	TRANSISTOR UN5111	
Q12	8-729-421-22	TRANSISTOR UN2211	
Q61	8-729-421-22	TRANSISTOR UN2211 (G) (TYPE 1-3)	
Q101	8-729-021-95	TRANSISTOR RN1441-A(TE85L)	
Q102	8-729-021-95	TRANSISTOR RN1441-A(TE85L)	

Ref. No.	Part No.	Description		Remark
Q201	8-729-021-95	TRANSISTOR	RN1441-A(TE85L)	
Q202	8-729-021-95	TRANSISTOR	RN1441-A(TE85L)	
Q301	8-729-424-08	TRANSISTOR	UN2111	
Q302	8-729-021-93	TRANSISTOR	uPA502T-T1	
Q401	8-729-807-12	TRANSISTOR	2SD1802-S	
Q402	8-729-020-67	TRANSISTOR	XN1A312-TX	
Q403	8-729-106-60	TRANSISTOR	2SB1115A	
Q404	8-729-421-22	TRANSISTOR	UN2211	
Q405	8-729-421-22	TRANSISTOR	UN2211	
Q502	8-729-020-67	TRANSISTOR	XN1A312-TX	
Q551	8-729-403-35	TRANSISTOR	UN5113	
Q552	8-729-231-74	TRANSISTOR	2SC4116-GL	
Q553	8-729-015-74	TRANSISTOR	UN5111	
Q571	8-729-020-67	TRANSISTOR	XN1A312-TX	
Q572	8-729-807-12	TRANSISTOR	2SD1802-S	
Q573	8-729-807-12	TRANSISTOR	2SD1802-S	
Q574	8-729-807-12	TRANSISTOR	2SD1802-S	
Q575	8-729-807-12	TRANSISTOR	2SD1802-S	
Q576	8-729-015-76	TRANSISTOR	UN5211	
Q577	8-729-106-60	TRANSISTOR	2SB1115A	
Q578	8-729-920-56	TRANSISTOR	FMG1	
Q579	8-729-020-67	TRANSISTOR	XN1A312-TX	
Q601	8-729-807-12	TRANSISTOR	2SD1802-S	
Q602	8-729-421-22	TRANSISTOR	UN2211	
Q650	8-729-421-22	TRANSISTOR	UN2211	
Q651	8-729-231-74	TRANSISTOR	2SC4116-GL	

< RESISTOR >

R19	1-216-081-00	METAL CHIP	22K	5%	1/10W
R20	1-216-049-00	METAL CHIP	1K	5%	1/10W
R21	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R22	1-216-049-00	METAL CHIP	1K	5%	1/10W
R23	1-216-075-00	METAL CHIP	12K	5%	1/10W
R24	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R25	1-216-833-11	METAL CHIP	10K	5%	1/16W
R27	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R30	1-216-113-00	METAL CHIP	470K	5%	1/10W
R31	1-216-073-00	METAL CHIP	10K	5%	1/10W
R32	1-216-073-00	METAL CHIP	10K	5%	1/10W
R33	1-216-049-00	METAL CHIP	1K	5%	1/10W
R34	1-216-119-00	METAL CHIP	820K	5%	1/10W
R35	1-216-815-11	METAL CHIP	330	5%	1/16W
R41	1-216-073-00	METAL CHIP	10K	5%	1/10W
R42	1-216-089-00	METAL CHIP	47K	5%	1/10W
R43	1-216-065-00	METAL CHIP (AEP)	4.7K	5%	1/10W
R43	1-216-073-00	METAL CHIP (G)	10K	5%	1/10W
R44	1-216-089-00	METAL CHIP	47K	5%	1/10W
R60	1-216-045-00	METAL CHIP	680	5%	1/10W
R61	1-216-049-00	METAL CHIP	1K	5%	1/10W
R81	1-216-208-00	METAL GLAZE (AEP)	2.7K	2%	1/8W
R81	1-216-671-11	METAL CHIP (G)	6.8K	0.5%	1/10W
R82	1-216-208-00	METAL GLAZE (AEP)	2.7K	2%	1/8W
R82	1-216-671-11	METAL CHIP (G)	6.8K	0.5%	1/10W
R83	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R85	1-216-663-11	METAL CHIP	3.3K	0.5%	1/10W
R87	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R88	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R109	1-216-214-00	METAL GLAZE	4.7K	2%	1/8W
R110	1-216-214-00	METAL GLAZE	4.7K	2%	1/8W
R111	1-216-841-11	METAL CHIP	47K	5%	1/16W
R112	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R113	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R114	1-216-073-00	METAL CHIP	10K	5%	1/10W
R115	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R116	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R117	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R118	1-216-833-11	METAL CHIP	10K	5%	1/16W
R119	1-216-834-11	METAL CHIP	12K	5%	1/16W
R121	1-216-234-00	METAL GLAZE	33K	2%	1/8W
R122	1-216-234-00	METAL GLAZE	33K	2%	1/8W
R123	1-216-182-00	METAL GLAZE	220	2%	1/8W
R124	1-216-182-00	METAL GLAZE	220	2%	1/8W
R125	1-216-216-00	METAL GLAZE	5.6K	2%	1/8W
R126	1-216-210-00	METAL GLAZE	3.3K	2%	1/8W
R127	1-216-216-00	METAL GLAZE	5.6K	2%	1/8W
R128	1-216-210-00	METAL GLAZE	3.3K	2%	1/8W
R129	1-208-500-41	METAL GLAZE	3.9K	2%	1/8W
R131	1-208-500-41	METAL GLAZE	3.9K	2%	1/8W
R209	1-216-214-00	METAL GLAZE	4.7K	2%	1/8W
R210	1-216-214-00	METAL GLAZE	4.7K	2%	1/8W
R211	1-216-841-11	METAL CHIP	47K	5%	1/16W
R212	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R213	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R214	1-216-073-00	METAL CHIP	10K	5%	1/10W
R215	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R216	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R217	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R218	1-216-833-11	METAL CHIP	10K	5%	1/16W
R219	1-216-834-11	METAL CHIP	12K	5%	1/16W
R221	1-216-234-00	METAL GLAZE	33K	2%	1/8W
R222	1-216-234-00	METAL GLAZE	33K	2%	1/8W
R223	1-216-182-00	METAL GLAZE	220	2%	1/8W

MAIN

Ref. No.	Part No.	Description			Remark
R224	1-216-182-00	METAL GLAZE	220	2%	1/8W
R225	1-216-216-00	METAL GLAZE	5.6K	2%	1/8W
R226	1-216-210-00	METAL GLAZE	3.3K	2%	1/8W
R227	1-216-216-00	METAL GLAZE	5.6K	2%	1/8W
R228	1-216-210-00	METAL GLAZE	3.3K	2%	1/8W
R229	1-208-500-41	METAL GLAZE	3.9K	2%	1/8W
R231	1-208-500-41	METAL GLAZE	3.9K	2%	1/8W
R301	1-216-085-00	METAL CHIP	33K	5%	1/10W
R302	1-216-017-00	METAL CHIP	47	5%	1/10W
R305	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W
R306	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W
R401	1-216-049-00	METAL CHIP	1K	5%	1/10W
R402	1-220-149-11	METAL GLAZE	2.2	10%	1/2W
R403	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R404	1-216-073-00	METAL CHIP	10K	5%	1/10W
R405	1-216-186-00	METAL GLAZE	330	5%	1/8W
R406	1-216-186-00	METAL GLAZE	330	5%	1/8W
R502	1-216-845-11	METAL CHIP	100K	5%	1/16W
R503	1-216-841-11	METAL CHIP (U500RDS)	47K	5%	1/16W
R507	1-216-837-11	METAL CHIP	22K	5%	1/16W
R510	1-216-049-00	METAL CHIP	1K	5%	1/10W
R515	1-216-097-00	METAL CHIP (TYPE 1)	100K	5%	1/10W
R516	1-216-097-00	METAL CHIP (TYPE 1)	100K	5%	1/10W
R520	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R522	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R523	1-216-097-00	METAL CHIP	100K	5%	1/10W
R524	1-216-097-00	METAL CHIP	100K	5%	1/10W
R525	1-216-845-11	METAL CHIP (U700RDS)	100K	5%	1/16W
R526	1-216-845-11	METAL CHIP (U500RDS)	100K	5%	1/16W
R527	1-216-089-00	METAL CHIP	47K	5%	1/10W
R528	1-216-089-00	METAL CHIP (U500RDS:G/U700RDS:G)	47K	5%	1/10W
R530	1-216-089-00	METAL CHIP (U500RDS:AEP/U700RDS:AEP)	47K	5%	1/10W
R531	1-216-097-00	METAL CHIP	100K	5%	1/10W
R532-539	1-216-097-00	METAL CHIP (TYPE 1, 2)	100K	5%	1/10W
R540	1-216-049-00	METAL CHIP	1K	5%	1/10W
R541	1-216-097-00	METAL CHIP	100K	5%	1/10W
R542	1-216-097-00	METAL CHIP	100K	5%	1/10W
R544	1-216-097-00	METAL CHIP (TYPE 1, 2)	100K	5%	1/10W
R544	1-216-296-00	METAL CHIP (TYPE 3, 4)	0	5%	1/8W
R545	1-216-845-11	METAL CHIP	100K	5%	1/16W
R547	1-216-845-11	METAL CHIP	100K	5%	1/16W
R548	1-216-837-11	METAL CHIP	22K	5%	1/16W
R549	1-216-837-11	METAL CHIP (U700RDS)	22K	5%	1/16W
R550	1-216-081-00	METAL CHIP	22K	5%	1/10W
R551	1-216-025-00	METAL CHIP	100	5%	1/10W
R552	1-216-025-00	METAL CHIP	100	5%	1/10W
R553	1-216-073-00	METAL CHIP	10K	5%	1/10W
R554	1-216-089-00	METAL CHIP	47K	5%	1/10W
R555	1-216-841-11	METAL CHIP	47K	5%	1/16W
R556	1-216-845-11	METAL CHIP	100K	5%	1/16W
R565	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R566	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R571	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R573	1-216-025-00	METAL CHIP	100	5%	1/10W
R575	1-216-809-11	METAL CHIP	100	5%	1/16W
R576	1-216-809-11	METAL CHIP	100	5%	1/16W
R577	1-216-017-00	METAL CHIP	47	5%	1/10W
R579	1-216-200-11	METAL GLAZE	1.2K	5%	1/8W
R580-583	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R584	1-216-833-11	METAL CHIP	10K	5%	1/16W
R586	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W
R587	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R588	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R589	1-216-837-11	METAL CHIP	22K	5%	1/16W
R590	1-216-845-11	METAL CHIP	100K	5%	1/16W
R592	1-216-845-11	METAL CHIP	100K	5%	1/16W
R599	1-216-097-00	METAL CHIP (TYPE 1)	100K	5%	1/10W
R601	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R602	1-216-049-00	METAL CHIP	1K	5%	1/10W
R603	1-216-037-00	METAL CHIP	330	5%	1/10W
R650	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W
R653	1-216-841-11	METAL CHIP	47K	5%	1/16W
R654	1-216-841-11	METAL CHIP	47K	5%	1/16W
R655	1-216-838-11	METAL CHIP	27K	5%	1/16W
R656	1-216-845-11	METAL CHIP	100K	5%	1/16W

< RESISTOR NETWORK >

RB504	1-239-426-11	RESISTOR, NETWORK (CHIP TYPE)	(2.2KX4)
RB508	1-236-907-11	RESISTOR, NETWORK (CHIP TYPE)	(100KX4)
RB512	1-236-907-11	RESISTOR, NETWORK (CHIP TYPE)	(100KX4)
RB516	1-236-907-11	RESISTOR, NETWORK (CHIP TYPE)	(100KX4)
RB520-525	1-236-907-11	RESISTOR, NETWORK (CHIP TYPE) (TYPE 1)	(100KX4)
RB571	1-239-426-11	RESISTOR, NETWORK (CHIP TYPE)	(2.2KX4)

Ref. No.	Part No.	Description	Remark
		< VARIABLE RESISTOR >	
RV10	1-238-605-31	RES, ADJ, CARBON 470K	
		< SWITCH >	
S501	1-572-272-11	SWITCH, SLIDE (POWER SELECT)	
S510	1-572-288-11	SWITCH, PUSH (NOSE)	
		< VIBRATOR >	
X1	1-567-848-11	VIBRATOR, CRYSTAL (7.2MHz)	
X502	1-567-821-11	VIBRATOR, CRYSTAL (4.19MHz)	
X503	1-579-242-11	VIBRATOR, CRYSTAL (4.332MHz)	
X504	1-579-952-21	VIBRATOR, CERAMIC (8MHz)	

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